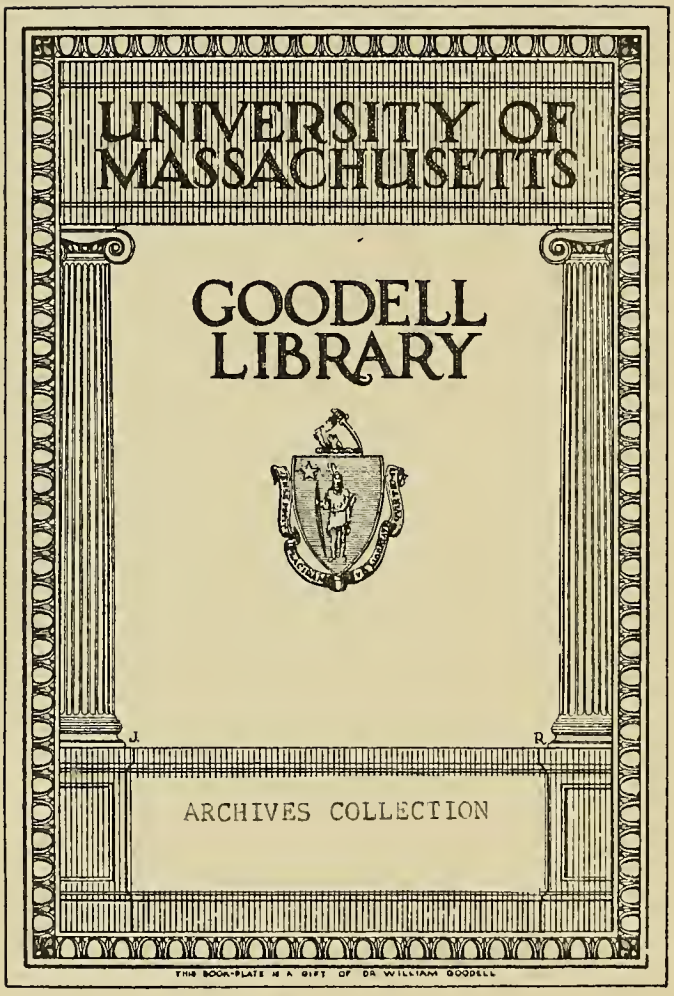
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Principles and Practice

ANNUAL REPORT OF THE PRESIDENT — 1957

UNIVERSITY OF MASSACHUSETTS

UNIVERSITY OF MASSACHUSETTS BULLETIN

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THE COMMONWEALTH OF MASSACHUSETTS

UNIVERSITY OF MASSACHUSETTS

AMHERST

OFFICE OF THE PRESIDENT

The Honorable Joseph W. Bartlett
Chairman, Board of Trustees
The University of Massachusetts

Dear Doctor Bartlett:

It is my privilege to present to you, to the Board of Trustees, and to the Governor and Citizens of the Commonwealth this report for the University of Massachusetts covering the year January 1, 1957 to January 1, 1958.

Respectfully yours,

Jean Paul Mather

Jean Paul Mather,
President

February 20, 1958

PRINCIPLE
as well as
PRACTICE

This annual report is divided between a thumbnail sketch of what happened of significance at the University of Massachusetts during 1957 and an inquiry into the nature of things after the happening.

PRACTICE — what happened

A generous and farsighted General Court, recognizing the need in the Commonwealth for extending public higher educational opportunities, appropriated record funds for operating the University and for expanding the physical facilities.

Adding $5,150,000 in capital outlay brought total appropriations during the four years past, for planning and construction of new buildings and facilities, to $17,170,329. This amount is twice the accumulated total of all capital outlay funds *at cost* appropriated in the 91-year history of the University prior to 1954.

During 1957, Federal grants of $200,000 for research facilities in the Science Center, $155,000 for research laboratories in the Liberal Arts Building, and $4,375 for Chemistry research equipment provided much needed material assets beyond state appropriations.

The operating budget totaled $7,852,670, of which 74% or $5.8 million is for salaries of staff. The other operating appropriations — including books, repairs, maintenance, educational supplies, equipment, etc. — amounted to just under $2,000,000 or about $175,000 *less than* the total revenues which the University returns to the General Fund from the collection of tuition, rents, fees, and prices of goods and services produced and sold.

Completion of the Student Union, financed by an annual student fee, put this significant recreation and activities center into operation February 1, 1957. In addition to the student programs and services provided, the Union brought under centralized management the University Store, the snack bars, and the Recognized Student Organizations' administration.

Beyond these significant financial statistics, there were important changes and advances in the program and work of the people of the University. In the interest of economy, efficiency, and improved service to the Commonwealth, the Entomology Department and the Plant Pathology Section of the Botany Department were transferred from the College of Arts and Sciences to the College of Agriculture. Joining with similar programs already in agriculture, the transfer established a single, new Department of Entomology and Plant Pathology. At the same time the former departments of Floriculture, Olericulture, and Pomology were combined into a Department of Horticulture in the College of Agriculture. These organizational changes will produce reductions in research and institutional costs from both state and federal funds. Duplicated jobs and efforts will be eliminated, total numbers of positions needed will be reduced in rank and number, and the resulting integration of programs should prove of benefit to agriculture and the taxpayer as well as to the University.

Application of Freedom Bill policy, after three years of search, made possible the restaffing of the Physics Department under the new leadership of nuclear scientist Dr. John D. Trimmer. The same policy applied to Agricultural Engineering brought Dr. Robert Kleis as the new Head of Department with additional competent staff.

A trust fund contract, negotiated with General Electric Transformer Division in Pittsfield, Massachusetts, through the School of Engineering started a branch engineering program in Pittsfield in September 1957. Thirty G. E. employees and fifty-seven other students on a fee basis enrolled. Costs of the program are paid by the General Electric Company and fees from other students. The program is self-supporting and represents a significant step in cooperation between a private corporation, a public university, and the local community — providing additional engineering educational opportunities for these critical times.

After a year of negotiation and planning, a final contract was negotiated with the International Cooperation Administration of the U. S. Department of State and Hokkaido University, Sapporo, Japan, for exchange of faculty in an education and training program. The program will be financed with I.C.A. funds without cost to the Commonwealth. President Harusada Suginome of Hokkaido

University and three of his staff visited in Amherst for over a month during the fall semester. Planning was completed for the exchange of personnel over a three-year period starting early in 1958.

This marked the second year of the Carnegie Language Project. Study and planning under this grant will insure a modern language laboratory, current in equipment and technique, for the new Liberal Arts building to be constructed during the coming year.

During the summer of 1957, under a $54,000 grant from the National Science Foundation, Professor Robert Wagner of the Department of Mathematics directed a very successful institute for upgrading and advancing the teaching of high school mathematics.

After nearly two years of planning and a careful review of related policy by the Board of Trustees, the Faculty Senate was organized. With an elected faculty membership, this body will serve as the representative legislative group for educational policy. Such organization provides a medium for fully discussing the evolving program of the University through a policy-making group with greater flexibility than the total faculty. This enables the

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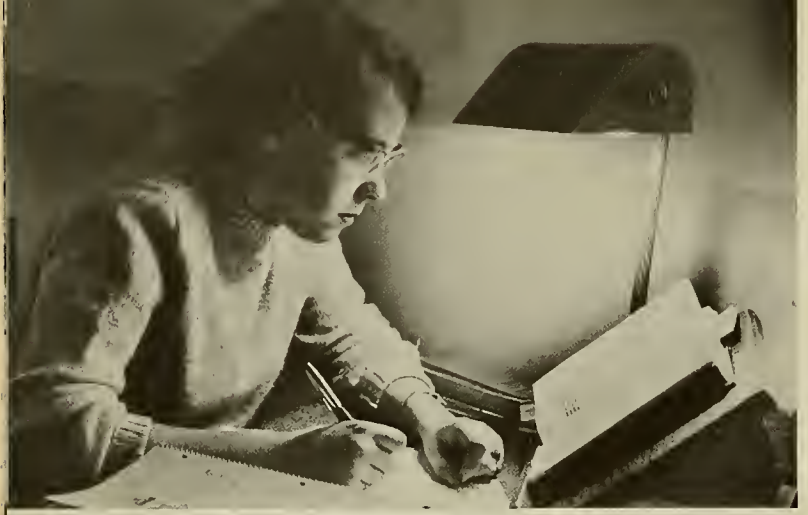

administration to use the monthly meeting of the entire faculty as a forum for communication and information.

Publications of the Bureau of Government Research under the able direction of Dr. John Gillespie demonstrated the positive contribution of research by this important part of the University family toward the solution of problems of state and local government. The second annual school for assessors conducted by the Bureau was much larger than the first and received high praise from all participants.

Two important studies continued through the year should eventually result in improved policies.

The report of the *ad hoc* committee on Outside Consulting and Research Activities, still under review by the Faculty Senate, should eventually provide a clear and complete policy framework for faculty contract activities beyond regular classroom instruction and personal research. The College of Arts and Sciences continues to review the entire general education concept. The ultimate goal is revision of the curriculum toward student requirements in a modern society within the complex of the general and specialized departments, divisions, schools, and colleges of a university.

A heartening increase in both enrollment and graduation for the School of Education demonstrates the effort of the University toward relieving the continuing and increasing shortage of qualified elementary and secondary school teachers.

So much for *PRACTICE.*

This part of the report admittedly covers only the highlights of the year's work. Extensive reports from the Schools and Divisions of the University, filed with proper authorities, give a more detailed picture of the aims and efforts of a loyal and conscientious staff in behalf of a vigorous and able student body.

PRINCIPLE — the "why" of what happens

In this section of the annual report I will raise some questions asking *why* we do or have done some of the things we practice. The spirit of these questions is not meant to be quarrelsome, or personalized in any way, or hypercritical, or even querulous. But where there is responsibility for accounting for the material debits and credits of a social institution (as the PRACTICE section of this report does), I believe there is an even greater responsibility for asking and answering the *why* questions. Just as higher education should provide young people with the ability to reason, think, and question *why*, so those responsible for the process should always be asking questions as well as providing answers about methods and facts — the *how* and *what* of our lives and livings. We must maintain a constant critique on quality if the quantity accomplishments are to mean anything.

The academic performance synonym for quality is the much used and abused word "standards," usually preceded by such high-sounding modifiers as "high," "excellent," "best," or "improved." I have yet to talk with any thoughtful educational administrator, however, who does not recognize that, when you speak of the "quality" or "standards" of a university, you refer to a complex of admissions, grading norms, quality of staff, facilities (including buildings *and* equipment), student attitudes, communication of administrative policies, and other tangible and intangible criteria just as difficult of continuous and objective evaluation.

It is conceivable that as an extreme policy any state might appropriate enough tax money to provide *public* higher educational opportunity for *all*

qualified high school graduates desiring a college education, but *not* admitted to private institutions in the state or private and public institutions outside the state. Some state universities in the Midwest and Far West approach this extreme, particularly where private colleges and universities are scarce or non-existent. Such an extreme compares, as an idea, with the concept of public elementary and secondary education long prevalent in the United States. And such an extreme, *in terms of abilities and performance potential*, would accept many more students from the annually growing pool of college applicants than present restrictive and selective admissions requirements.

But the University of Massachusetts is farther away from this ideal extreme in New England as well as the United States than any other state university. Why?

And in terms of *quality* as well as quantity, what should we do about it? We face greater relative pressures for admission, even if we reach our target of 10,000 students by 1965, than other state universities. This is true simply because we began to develop and expand *later* than other public universities. And as the private colleges and universities of Massachusetts preserve their national character for endowment, and their national and international character for admissions, the college age population of the state increases by over 50% of the present base. Excepting only the large metropolitan universities and colleges in Boston, the preponderant enrollment in the entire remaining group of slightly expanded private universities and colleges will continue to come from *outside the state*. Year by year other states are reducing and restricting, by legislative or trustee mandate, the acceptance of out-of-state applicants. These mandates will further shrink opportunities for Massachusetts high school graduates and drive more and more of them at least to the application line at the University of Massachusetts. Short of some type of miraculous fiscal "break-through" or "crash program," I submit that we have no other choice, *in terms of what is still gradual annual progress*, than to become more selective and objective in our admissions process. Last year's annual report made much of the broad geographical distribution of students then enrolled. In retrospect, the only real significance was that 58% came from Worcester and east — where the bulk of the population ac-

tually lives. If the tax resources made available in the future continue in their present ratio to the *increasing* number of applicants, we have no other choice than to take the *best* applicants, regardless of geography, and even if they come *preponderantly* from one or a few large metropolitan centers. *There is nothing sacred about "ruralism" or "broad distributions" if the resources available are limited relative to the numbers that apply.* We haven't time, money, or people enough to evaluate or educate a great mass of high school graduates, low in either ability or motivation or both, in the maudlin hope of selecting enough to develop a "well-rounded-out" campus with country club characteristics ranging from greenskeepers to professionals. I believe we should use every professionally developed objective admission criterion available. I believe we should require at least the College Entrance Aptitude Tests of *all* applicants considered, as an additional criterion to be correlated with total high school performance and the recommendations of high school principals, superintendents, and guidance counselors. Time spent by our admission officers on such correlation evaluations plus *extended* travel contacts with high school administrators, would, I believe, be worth twice as much as time now spent on campus interviewing applicants. I believe that we cannot afford to turn down students with *better* total performance records from large urban high schools in favor of graduates of small high schools just to preserve an admissions or campus atmosphere of ruralism or broad geographical distribution. This recognizes of course that, if *all* criteria are included, the exceptional student in the small school will receive just consideration. And we can do no better service to the cause of awakening young people to the necessity for effort and accomplishment early in their high school careers than to pass the word that the State University is getting tougher and tougher at the admissions line.

Once students are admitted, I believe there is room for inquiry about the norms or standards established by the grading process and the resultant flunk rate. The Class of 1958 is the first to graduate under the Quality Point System which, with only minor variations in point interpretations, has become practically unanimous in usage by colleges and universities throughout the country. Theoretically it is supposed to establish the principle that all who graduate shall accomplish at least an

average performance for the total four-year program. By letting the student know throughout his enrollment where he stands, it is assumed that he will work hard to raise his quality point average by better successive semester or quarter records whenever he slips below the average or approaches the "flunk out" quality point minimum. During the first four years of application of the system at the University, I think we have not been tough enough in its application. And consequently I do not believe the student body at present respects the principle, the method, or the quality objectives of the system.

Recent statistical studies, presented by the Provost at monthly faculty meetings, show a relatively "normal" distribution curve for all grades administered in a semester — skewed if at all toward the left, or giving a better break above the "C" average required for graduation. But these total University figures aren't significant. We cannot assume that the number of flunkees per semester in a growing student body should be kept relatively constant. I believe it is an obligation to the taxpayer as well as the educational world to drop poor performers. I endorse the courage and the wisdom of the President of the University of Delaware who reports in his last annual message the "academic" failure of twice as many students from an under-

PRACTICE

graduate student body less than half the size of ours.

Such courage and wisdom, however, should be accompanied here by extended analysis of our ac-

tions rather than snap judgments. Our problem seems to me to lie in variations between scattered departments of the schools, colleges, and divisions

PERFORMANCE

in norms back of grading. Can it be that objectives occasionally are geared to failing students, rather than to teaching them? Is it possible that norms are set sometimes above either the selectivity or ability levels of the best student body we can assemble out of *a majority of publicly educated high school graduates from the single state of Massachusetts?* Of course the problems of admission and performance are all of a piece. More selective admissions should mean better performance. But after fifteen years as a lecturing professor, I still believe that the responsible teacher should never be freed of the introspective query, "Am I always teaching to advance each student in my class as far as *he* can possibly go through *my* daily performance?" And at the same time, "Am I expecting a norm of impossible attainment for even the best, let alone the average student in my classes?" No one proposes an homogenized student society of average or less than average performance from such inquiry, any more than we should propose general norms based on the performance of geniuses. An *ad hoc* faculty committee has been appointed to review the entire University grading process and report recommendations and conclusions for consideration of the Faculty Senate during the coming year. I await with interest these considerations.

Why does the present administration consist-

University of Massachusetts Enrollment — September 1957

UNDERGRADUATE COLLEGE

Class	1958 Men	1958 Women	1959 Men	1959 Women	1960 Men	1960 Women	1961 Men	1961 Women	Total Men	Total Women	Total
Arts and Sciences	207	127	202	157	240	219	245	362	894	865	1759
Education	0	50	2	39	0	50	2	88	4	227	231
Engineering	194	2	207	0	252	3	305	4	958	9	967
Business Administration	123	4	120	9	119	10	103	13	465	36	501
Agriculture	63	5	76	6	61	2	52	3	252	16	268
Home Economics	0	28	0	26	0	33	0	45	0	132	132
Physical Education	23	0	18	0	13	0	23	0	77	0	77
Nursing	0	4	0	17	0	14	0	21	0	56	56
Total	610	220	625	254	685	331	730	536	2650	1341	3991
Total by Classes	830		897		1016		1266		3991		
Specials									11	28	39

GRADUATE SCHOOL

Men	Women	Total
308	122	430

STOCKBRIDGE SCHOOL

	1958	1959	Total
Men	148	175	323
Women	3	4	7
			330
Special			1
			331

SUMMARY

Undergraduate School	4030
Graduate School	430
Stockbridge School	331
Grand Total	4791

ently and publicly question the system of commission and bureaucratic controls over our operations, *beyond the express statutes and mandates of the legislature?* This question is often asked of the President with the repeated and wearisome advice of many, "Why don't you just relax, recognize that you're in Massachusetts where things are different, and accept things as they are?" My answer, as a matter of *principle*, is that I have one undivided and continuous loyalty. That loyalty, come what may, is to the educational welfare of the student body. When processes or methods are made more significant than results; or when processes or methods hamper or reduce the accomplishment of results — in principle one should resist. And in principle we should be held accountable far more for *results* than for *methods*.

A nationally recognized educator and administrator has put the matter very succinctly. I call in quote here on his wisdom and ability. . .

> "Higher education deserves and should have a highly autonomous status in the governmental organization of which it is a part, be it state or municipal or federal. In brief the reasons are its difference in objective, its breadth of public responsibility, the nature of its management, its professional and technical quality, and its non-political character, most of which are more or less in contrast to most other departments of government. Almost all states leave to boards of trustees full authority over all matters relating to academic and professional personnel. Most states require a more or less complete personnel reporting in connection with the budget but leave final determination to the boards *after the appropriation is made*. No right-minded person expects to be free from accountability or to have the 'money put in the bank' for use with no accounting required. But when the state creates an agency like a board of trustees and the legislature makes appropriations to it after detailed examination of its budget, why set up additional day-to-day checks by fiscal employees? Controls, even though assigned to top officials, are actually frequently exercised by subordinates of clerical rather than executive responsibility. Legislatures probably have been led into establishment of such checks on the plea that money

can be saved. Such a point of view overlooks the fact that members of boards of higher education are just as responsible and just as honest as state administrative officials, that they are just as interested in economy as any state official, that they and not the latter are charged with the responsibilities of management, and that with responsibility must go authority, plus accountability, of course."[1]

It was in the spirit and letter of this quote that the University sought and obtained legislative approval of the Freedom Bill covering professional personnel policies in 1956. It is the continuing spirit of our work in admissions, in hiring, and in teaching. It will always result in additional questions, requests for remedial legislation, and public reviews of commission or bureau rules and regulations, *whenever the quality of education* is threatened, hampered, or impaired. It is the job of public education as well as private education to reserve a sanctified place for development and exploration of the ideas of men. That sanctity is violated whenever any compromise of expediency, great or small, is made in the policies of an educational institution. And I am sure the taxpayers, interested in the educational welfare of their sons and daughters, will support in dollars as well as principle such a concept.

It seems so obvious to me as to be unnecessary of reiteration that a tax supported public university, in these complex and competititve times, must be discriminating in the establishment of its standards of admission, performance, and operation in the best interests of *efficiency with quality*. But at the same time it *cannot* be discriminatory on the basis of party affiliation, religious belief, residence, nationality, or creed. People are to be admitted and people are to be hired (from janitors to full professors) on the basis *only* of their professional competence or capacity, and their personal character. Any other principle for the University is to me intellectual dishonesty and moral incompetence. Trustee policy of June 1957 will admit five per cent of each entering class from outside the Commmonwealth. This is but a small gesture toward non-provincialism as well as reciprocation for the many Massachusetts students

[1] May 2, 1955. Dr. Lloyd Morey (President of University of Illinois), National Association of State Universities. "*Governmental Control of Public Higher Education.*"

educated in other state universities at their tax expense. In spirit, after a three-year period of admitting only resident undergraduates, this policy represents a discriminating interpretation of quality *without* being discriminatory in principle. Able students as well as able faculty, the "idea people" of tomorrow, are not confined within state, or county, or election district boundaries.

In reading one of the annual reports submitted by Deans and Division Heads another question of principle was raised. In essence the question was, "Should we practice a kind of intellectual isolationism by an excessive insistence on teaching alone as our primary function? Why shouldn't research be pushed and developed as the foundation for better teaching as well as recognized scholarship?" The point is well taken. Although the amount received as private and government grants for fellowships and research has increased from around $80,000 in 1953 to $279,000 during the past year, this total is insignificant in relation to the pool of latent capacities inherent in the total faculty. In addition to specialized contract research there is a very real need for additional basic research. It is absolutely fundamental to the development of a great university that additional funds, *including line appropriations* of state funds, be made available in the future for both basic and applied research. History shows that dollars spent for "know-how" in other state university budgets have always returned many-fold in economic, scientific, and social benefits to the spending state. We are making progress with "outside" funds. Better and faster progress should be forthcoming in both state and agency expenditures.

The questions raised in this report are but a few of the most pressing of the problems that plague us. I raise them now, with faith and optimism that they can be solved and that all of us will work toward their solution. For I am humbly conscious of the great and good work of the years and the people of this University. Here is a priceless institution of community. Common hopes and aspirations of common people have, for nearly a century, made this campus an honest, reputable, and decent place of scholarship and study. Dedicated, as are all the great land grant colleges and universities, to providing educational opportunity for able youth of limited means — the University of Massachusetts has developed the greatest single

asset of the Commonwealth — young people.

There is no spiritual task of greater moment than that of shaping the intellectual character of young men and young women. Just as it is intellect that distinguishes man from beast so the very moral fiber of a society is a reflection of how men think on all things. And university is organized that all those of it are best engaged when searching ever and forever for the universe that is truth. This search becomes the wisdom of the ages when it moves always to translate the curiosity of man into progress, *not* dictated by selfish or expedient ends.

It is a piteous thing to be
Enlisted in no cause at all,
Unsworn to any heraldry;
To fly no banner from the wall,
Own nothing you would sweat or try for,
Or bruise your hands or bleed or die for.

To take the smooth and middle path,
The half-heart interest, the creed
Without extreme or hope or wrath,
Ah, this were heresy indeed
That all God's pity will not stay for,
And your immortal soul will pay for.

APATHY by *Sara Henderson Hay**

Jean Paul Mather,
President

**(With appreciation to the University of Massachusetts* Collegian, *student newspaper.)*

Personnel Changes

JANUARY 1 — DECEMBER 31, 1957

FACULTY

Deaths:

GEORGE H. LYTTLE, *Assistant Professor of Electrical Engineering*
RICHARD E. PRIDE, *Associate Professor, Waltham*

Retirements:

RALPH W. DONALDSON, *Extension Professor of Agronomy*
EDWARD D. EMERSON, *Assistant Professor of Mechanical Engineering*
JOHN N. EVERSON, *Assistant Professor of Agronomy*
CARL R. FELLERS, *Professor and Head of Department of Food Technology*
HARLEY A. LELAND, *Extension Professor of Youth Work*
MINER J. MARKUSON, *Associate Professor of Agricultural Engineering*
EARLE H. NODINE, *Associate Professor of Youth Work*
ROBERT B. PARMENTER, *Extension Professor of Forestry*
WALLACE F. POWERS, *Head of Department of Physics*
CLARK L. THAYER, *Professor and Head of Department of Floriculture*

Promotions:

To Head of Department:

THEODORE C. CALDWELL, *History*
WILLIAM B. ESSELEN, *Food Technology*

To Professor:

ROBERT T. CURRAN, *Physical Education*
JOHN H. DITTFACH, *Mechanical Engineering*
J. HARRY RICH, *Forestry*
WILLIAM E. TOMLINSON, JR., *Cranberry Station*

To Associate Professor:

JOHN W. ANDERSON, *Accounting*
DOROTHY DAVIS, *Home Economics*
ROBERT W. DAY, *Mechanical Engineering*
SEYMOUR EPSTEIN, *Psychology*
TSUAN HUS FENG, *Civil Engineering*
THOMAS GROW, *Civil Engineering*
LAWRENCE C. HACKAMACK, *Business Administration*
ROBERT B. JOHNSON, *Romance Languages*
G. STANLEY KOEHLER, *English*
HELEN O'LEARY, *Education*
ELIOT C. ROBERTS, *Agronomy*
SARGENT RUSSELL, *Agricultural Economics*
L. LAWRENCE TAYLOR, *to Controller*
ROBERT L. TICKNOR, *Landscape Architecture, Waltham*
JAY R. TRAVER, *Zoology*
JOHN W. ZAHRADNIK, *Agricultural Engineering*

To Assistant Professor:
Herschel G. Abbott, *Forestry*
Gerard Braunthal, *Government*
Richard H. Brown, *History*
Edward L. Davis, *Botany*
Gellestrina T. DiMaggio, *Nursing*
Mrs. Katherine L. Esselen, *Home Economics* (½ time)
Sumner M. Greenfield, *Romance Languages*
Richard D. Harper, *Speech*
Alexander Hull, Jr., *French*
Alex R. Page, *English*
Robert A. Potash, *History*
Mrs. Emily Thies, *Home Economics*

Appointments:

Richard A. Gregg, *Visiting Lecturer in Russian* (½ time)
John B. Halsted, *Visiting Lecturer in History* (⅓ time)
Rudolph H. Kyler, *Visiting Lecturer in Business Administration*
Edwin C. Rozwenc, *Visiting Lecturer in History* (⅓ time)
John L. Teall, *Visiting Lecturer in History* (⅓ time)

To Head of Department:
Robert W. Kleis, *Agricultural Engineering*
John D. Trimmer, *Physics*

To Dean of School of Business Administration:
Himy B. Kirshen

To Assistant University Librarian:
Irene M. Kavanaugh

To Associate Executive Director of Associate Alumni:
Francis D. Driscoll

To Foods Manager of Student Union:
Edward A. Buck

To Professor:
Joseph D. Burroughs, *Home Economics* (*Human Relations*)
Robert J. Doolan, *Engineering* (*Director of G. E. Pittsfield Program*)
Philip Rosen, *Physics*

To Associate Professor:
Paul D. Agarwal, *Electrical Engineering*
Albert S. Anthony, *Education*
Warren Averill, *Food Technology*
Joe Todd Clayton, *Agricultural Engineering*
Oswald C. Farquhar, *Geology*
Curtis A. Johnson, *Agricultural Engineering*
Theodore W. Leed, *Agricultural Economics*
Rudolf Mathias Schuster, *Home Economics*
John H. Noyes, *Forestry*
Barbara R. Snowman, *Home Economics*
Warren M. Teichner, *Psychology*
Harriet J. Wright, *Home Economics*

To Assistant Professor:
David C. Bischoff, *Physical Education*
Ernest M. Buck, *Dairy & Animal Science*
Bruce W. Calnek, *Veterinary Science*
David J. Dickinson, *Mathematics*
Katharine S. Duroe, *Home Economics*
Paul Eck, *Floriculture, Waltham*
John H. Foster, *Agricultural Economics*
Edwin A. Gere, Jr., *Bureau of Government Research*
Robert A. Gessert, *Electrical Engineering*
Edwin W. Hanczaryk, *Home Economics*
Charles A. Herald, *Electrical Engineering*
Carlton E. Hunter, *Mechanical Engineering*
Klaus E. Kroner, *Mechanical Engineering*
Elmer Lawson, *Education*
Marjorie M. Merchant, *Home Economics*
Roger A. Morse, *Horticulture*
Margaret J. Mosher, *4-H Club*
John S. Norton, *Agricultural Engineering, Wareham*
Joseph M. O'Byrne, *Mechanical Engineering*
Paul A. Pollock, *Agricultural Communications*
John L. Ragle, *Chemistry*
Noel J. Reebenacker, *Physical Education*
Vincent R. Rogers, *Education*
F. Miles Sawyer, *Food Technology*
Robert H. Wyllie, *Education*

To Editor:
Marjorie L. Harthan

To Farm Superintendent:
Bernard L. Hilton

To Instructor:
Alphonso Gil-Azpeitia, *Mathematics*
John E. Beam, *Dairy & Animal Science* (½ time)
Thomas J. Becker, *Economics*
Rufus T. Bellamy, *English* (⅙ time)
Ernesto Beltran, *Chemistry* (¼ time)
Stanley M. Bemben, *Civil Engineering*
Robert A. Bieber, *Agricultural Economics* (½ time)
Howard E. Bigelow, *Botany*
Mrs. Margaret E. Bigelow, *Botany* (½ time)
David B. Boothby, *Mathematics* (⅓ time)
Frank R. Bridges, Jr., *Veterinary Science*
Mrs. Helen E. Brown, *Mathematics* (¾ time)
Isaac C. Camber, *Food Technology* (½ time)
You-keng Chiang, *Economics*
Elizabeth A. Clarke, *Nursing*
Justin L. Cobb, *Physical Education*
Warren L. Comstock, *Dairy & Animal Science* (½ time
Mrs. Marjorie M. Cook, *Mathematics* (⅓ time)
John J. Coughlin, Jr., *Agricultural Communications*
Albert W. Craig, *History*
Seth H. Crowell, *Electrical Engineering* (½ time)
Marcel Daneau, *Agricultural Economics* (½ time)
Arthur D. D'Antonio, *Economics*
Frank M. DeFillipes, *Physics*
William Deminoff, *English*

Frederick J. Dzialo, *Civil Engineering*
George E. Egan, *Electrical Engineering* (½ time)
Paul Ellen, *Psychology* (⅓ time)
Heinrich Fenner, *Dairy & Animal Science*
Fred Fernich, *Dairy & Animal Science* (½ time)
Janet L. Fietsam, *Home Economics*
Melvin Gersham, *Bacteriology* (½ time)
Philip Goorian, *Agricultural Economics*
Edward M. Hadro, *Electrical Engineering*
Mrs. Lois S. Harris, *German* (½ time)
Jane A. Hastie, *Romance Languages*
Ernest L. Hayes, *Agricultural Economics* (½ time)
Mrs. Christiane Heller, *German* (½ time)
Ward M. Hunting, *Food Technology*
Vincent Ilardi, *History*
Robert J. James, *Physical Education*
Robert M. Jordan, *English* (¼ time)
Christopher Kantianis, *Landscape Architecture* (½ time)
Donald R. Lambert, *Food Technology* (½ time)
Arnold Levine, *Sociology*
Donald T. Liden, *Dairy & Animal Science* (½ time)
Frank Lindenfeld, *Sociology*
Mrs. Beverly W. May, *Speech*
Curtis Messinger, *Geology* (½ time)
Rud S. Meyerstein, *Romance Languages*
Robert V. Miller, *Psychology*
Mrs. Eleanor L. Niedeck, *Speech*
John C. Osgood, *Education* (½ time)
Thomas M. Ott, *Food Technology* (½ time)
Orlo A. Powell, Jr., *Mechanical Engineering* (½ time)
Mrs. Mary G. Powers, *Sociology* (½ time)
Pilar Regalado, *Spanish*
Jane D. Reid, *English* (½ time)
Charles L. Robertson, *Government* (¾ time)
Mrs. Grace S. Rollason, *Zoology*
Merton I. Rosenberg, *Electrical Engineering*
Nancy C. Rupp, *Physical Education for Women*
Bernard Ryack, *Psychology* (½ time)
Sylvan Schendler, *English* (½ time)
Nicholas F. Slobodyanik, *Bacteriology* (½ time)
Marion W. H. Sonnenfeld, *German* (½ time)
Marc J. Swartz, *Sociology*
Chee-Teck Tan, *Food Technology* (½ time)
Joseph Troll, *Agronomy*
William F. Woehrlin, *History*
Alfred M. Wynne, *Chemistry*

Resignations:

Professor:
Lee E. Holt, *English*
Roland W. Winterfield, *Veterinary Science*

Associate Professor:
Allen B. Barton, *Agricultural Engineering*
Richard M. Colwell, *Business Administration*
Arthur A. Socolow, *Geology*
Maurice A. Unger, *Business Finance*

Assistant Professor:

Donald K. Adams, *Education*
Edward P. Clancy, *Physics*
Dwight E. Erlick, *Psychology*
Edward G. Fennell, *Education*
Marcel Gagnon, *Food Technology*
Robert M. Kingdon, *History*
Portia A. Mears, *Experiment Station Editor*
Roger A. Morse, *Waltham*
Jerome Myers, *Psychology*
Leonard R. Parkinson, *Food Technology*
William M. Rourke, *Education*

Instructor:

Verne A. Adams, *Dairy & Animal Science*
Donald Anderson, *Chemistry* (¼ time)
William M. Atwood, *Agronomy*
David C. Bartlett, *Civil Engineering*
Mary M. Bartlett, *Dairy & Animal Science*
David J. Beaubien, *Electrical Engineering* (½ time)
Rufus T. Bellamy, *English* (⅙ time)
Ernesto G. Beltran, *Chemistry* (¼ time)
Sonya Bergquist, *Botany*
John L. Blaisdell, *Agricultural Engineering* (½ time)
William Bock, Jr., *Physical Education* (½ time)
Mrs. Helen E. Brown, *Mathematics* (¾ time)
Richard O. Carson, *Physics*
You-keng Chiang, *Economics*
Louis E. Conhaim, *History*
Seth H. Crowell, *Electrical Engineering* (½ time)
Mrs. Irene H. Davis, *Food Technology* (½ time)
Robert V. Decareau, *Food Technology* (½ time)
Francoise-Marguerite DuParquet, *Romance Language.* (⅓ time)
William H. Durfee, *Mathematics* (⅓ time)
George E. Egan, *Electrical Engineering* (½ time)
Elizabeth M. Elbert, *Food Technology* (½ time)
Mrs. Miriam F. Fiedler, *Psychology* (¼ time)
Mrs. Helen L. Field, *Psychology*
Harvey F. Fisher, *Chemistry*
Remo Franceschini, *Food Technology* (½ time)
James Gardner, *Landscape Architecture* (½ time)
Gladys Geiger, *Home Economics*
Edward M. Hadro, *Electrical Engineering*
Joseph B. Hampton, *Government*
Mrs. Jane A. Hastie, *Romance Languages*
Roland F. Hess, Jr., *Physical Education* (½ time)
Robin D. S. Higham, *History*
John L. Hobart, *Dairy & Animal Science*
Richard F. Jackson, *Food Technology* (½ time)
Harry S. Jewusiak, *Electrical Engineering*
Miguel A. Jimenez, *Food Technology*
Mrs. Vilma V. Joa, *Romance Languages* (½ time)
Robert M. Jordan, *English* (¼ time)
Reuben Khatchikian, *Food Technology* (½ time)
Robert K. Kinsey, *Economics*
Rauno A. Lampi, *Food Technology* (½ time)
Arnold E. Levitt, *Chemistry*

Harvey Lifton, *Psychology* (¼ time)
John A. MacCombie, *French*
Donald F. McCaffrey, *Education* (½ time)
Ira Mintz, *Psychology* (½ time)
Anand G. Naik-Kurade, *Food Technology* (½ time)
Mrs. Clara K. Nicholson, *Agricultural Economics* (½ time)
Neil L. Norcross, *Bacteriology* (½ time)
Mary Jean O'Donnell, *English* (½ time)
Clifford N. Oliver, *Mathematics* (¼ time)
John C. Osgood, *Education* (½ time)
Donald A. Parks, *Geology* (½ time)
Joseph A. Pavelcak, *Mathematics* (⅓ time)
Mrs. Mary G. Powers, *Agricultural Economics*
Avrom Romm, *Government* (⅓ time)
Bernard L. Ryack, *Psychology* (½ time)
Joseph L. Sannelle, *Chemistry* (¼ time)
Sylvan Schendler, *English* (½ time)
Neal T. Watson, *Mathematics*
John M. White, *Agronomy* (½ time)
Robert E. Will, *Economics*
Theodore Wishnetsky, *Food Technology* (½ time)
Henry B. Woronicz, *Physical Education*

Leaves of Absence:

Doris E. Abramson
John S. Bailey
David R. Clark
Frederick E. Cole
Edwin D. Driver
J. Murray Elliot
Ralph L. France
Paul A. Gagnon
E. Vickery Hubbard
Oreana Merriam
John W. Mohn
Israel H. Rose
Sidney Schoeffler
Walter W. Smith
Jonas Vengris
Mrs. Margaret K. Wilhelm
Thomas O. Wilkinson

University of Massachusetts

FINANCIAL REPORT

FOR THE YEAR ENDING JUNE 30, 1957

Form 29. 800-(2)-1-56-916571

UNIVERSITY OF MASSACHUSETTS

FINANCIAL REPORT

FOR THE YEAR ENDED JUNE 30, 1957

KENNETH W. JOHNSON
TREASURER

BOARD OF TRUSTEES

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Dennis Michael Crowley, B.S., M.S., LL.B.	Boston
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Ernest Hoftyzer, B.S.	Wellesley
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Jean Paul Mather, B.S.C., M.B.A., M.A., D.Sc., LL.D., President of the University
Owen B. Kiernan, B.S., Ed.M., Ed.D., Commissioner of Education
Charles H. McNamara, Commissioner of Agriculture

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Kenneth William Johnson, B.S., Amherst, Treasurer

OFFICERS OF THE UNIVERSITY

Jean Paul Mather, B.S.C., M.B.A., M.A., D.Sc., LL.D., President
Shannon McCune, B.A., M.A., Ph.D., Provost
James W. Burke, B.S., Secretary
Kenneth W. Johnson, B.S., Treasurer

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This year marks several significant accomplishments in the development of the University. The Master Plan for the layout of the campus for the programmed growth to 10,000 students by 1965 from the 4,516 students of September, 1956, was completed and printed for distribution in brochure form. This constitutes a guide for the significant capital outlay program now in progress.

Appropriations of state funds for new buildings and facilities for the past four years have been:

1954	$4,835,000
1955	3,637,000
1956	2,867,000
1957	5,150,000
Total	$16,489,000

In addition to this amount there has been available for capital outlay from state funds for planning construction and contingencies an amount of $681,329.

During this year federal grants of $200,000 for research facilities for Zoology in the Science Center, $155,000 for research laboratories for Psychology in the Liberal Arts Building, and $4,375.00 for research equipment for Chemistry were received under the provision of the Health Research Facilities Grants of the National Institute of Health in accordance with Public Law 835 of the 84th Congress.

Adding to this the gift of $50,000 for a laboratory building for the study of diseases of large animals, the University has had $17,579,704 available for its plant development program in the last four years. This program is moving steadily toward completion through the planning design and construction stage.

Self-Liquidating Program

Paralleling the state-supported building program is the self-liquidating program for dormitories, apartments, and the Student Union of the University of Massachusetts Building Association which builds for the University. This year has seen the completion of the $2,000,000 Student Union Building, the second section of Van Meter dormitory at a cost of $620,000 and the start of another dormitory costing $580,000.00, plus a $1,000,000 Faculty and Married-Student Housing Project of 82 apartments. These buildings are built by the University of Massachusetts Building Association, a private corporation, under special legislative authorization with funds raised by the public sale of bonds and, when completed, leased to the University.

When the bonds have been amortized, the buildings become the property of the University and the Commonwealth at no additional cost.

During the same four-year period, 1954-1957, when the state was appropriating $17,170,329 for buildings and federal and other private funds totaled $409,375.00, the University of Massachusetts Building Association, without any net cost to the citizens of the state, was constructing $5,200,000 of new buildings. This means that during this four-year period, the Capital Outlay Program of the University was, in total, $22,779,704. It is important to know that part of this building program has been devoted to replacing obsolete facilities. Continued capital outlay appropriations and dormitory authorizations will be necessary in accordance with the Master Plan and the Trustees' Budget Programs to meet the plant requirements for 10,000 students.

Student Union Operation

The newly completed Student Union Building was placed in operation February 1, 1957. It has brought under one management the student activities programs of the Union, the University Store, the snack-bar formerly operated by the Store which has been expanded into a Student Union Food Service handling both snack-bar and catering service, and the Recognized Student Organizations administration. The operating statements of these activities appear in this report as Schedule J and Schedule K-1 through K-5. It is significant to note that this is entirely a self-supporting program without the use of state funds.

New Programs

During the year a trust fund contract was negotiated with the General Electric Company Transformer Division, in Pittsfield, Massachusetts, under which the University, through its School of Engineering, will conduct an engineering program in Pittsfield for selected employees of GE. This is being paid for by the General Electric Company. The courses have been opened to other students in the area on a fee basis. The entire program is designed to be self-supporting and represents a significant step in cooperation between private industry and a public university.

Another important development has been the negotiation of a contract with the International Cooperation Administration of the United States Department of State and Hokkaido University, Sapporo, Japan, for the exchange of faculty in an education and training program in agriculture. This program will be financed with ICA funds without cost to the Commonwealth.

Endowments and Special Gifts

The Endowment Funds were increased during the year by three gifts totaling $39,221. Special gifts for scholarships, fellowships, and research grants totaled $279,181.06 as set forth in Schedule B-8.

Audit

In accordance with state law, all accounts of the University are examined each year by the State Auditor. The last audit covered the period of August 15, 1955 to September 4, 1956. At the time this report was prepared the audit for the current period was being completed.

All statements and schedules of state funds contained herein have been examined by the Comptroller's Bureau of the Commonwealth and approval given for publication.

Publication of this document approved by Bernard Solomon, State Purchasing Agent - No. 44.

Schedule A

BALANCE SHEET AS OF JUNE 30, 1957

Assets

I.	State Funds:		
	Appropriation Balances held by State Treasurer		
	Other Maintenance	$39,247.71	
	Capital Outlay	27,961.93	
	Accounts Receivable	6,288.54	
	Inventory of Supplies	542,576.10	
			616,074.28
II.	Federal Funds:		
	Cash - First National Bank of Amherst		115,671.80
III.	Endowment Funds: (Schedule A-1)		
	Income Account - Cash, Amherst Savings Bank	10,000.00	
	Income Account - Cash, First National Bank of Amherst	5,399.77	
	Principal Account - Cash, Amherst Savings Bank	56,332.56	
	Principal Account - Cash, Ware Savings Bank	40,913.83	
	Principal Account - Cash, Easthampton Savings Bank	17,300.00	
	Principal Account - Cash, First National Bank of Amherst	247.75	
	Principal Account - Pool Investment Securities	271,682.26	
	Principal Account - Securities not Pooled	7,500.00	
	Unamortized Premiums on Pool Investments	50.89	
	Accrued Interest	172.77	
			409,599.83
IV.	Student Loan Funds:		
	Cash - First National Bank of Amherst	12,536.28	
	Cash - Amherst Savings Bank	940.00	
	Notes Receivable	7,527.22	
			21,003.50
V.	Trust Funds:		
	Cash on Hand	309.14	
	Cash - First National Bank of Amherst	90,857.11	
	Cash - Ware Savings Bank	75,350.97	
	Cash - Woronoco Savings Bank	91,263.08	
	Cash - Amherst Savings Bank	95,478.69	
	Cash - Easthampton Savings Bank	25,000.00	
			378,258.99
VI.	Agency Funds:		
	Cash - First National Bank of Amherst		35,275.55
VII.	Plant Funds:		
	Land	198,913.08	
	Buildings*	11,762,056.85	
	Improvements other than Buildings	1,974,919.13	
	Equipment	3,316,638.91	
			17,252,527.97
	Total Assets		$18,828,411.92

*The University also leases from the University of Massachusetts Building Association 14 dormitories, an apartment building and Student Union Building, representing investment of $7,908,446.60. The principal is amortized and the buildings eventually become the property of the University.

Schedule A (Continued)

BALANCE SHEET AS OF JUNE 30, 1957

Liabilities

State Funds:		
Total Appropriation Balances	$67,209.64	
Due State Treasurer	6,288.54	
Expendable Supplies	542,576.10	
		616,074.28
II. Federal Funds:		
Balance		115,671.80
III. Endowment Funds:		
Income on Investments - Balances (Schedule A-2)	15,572.54	
Principal of Fund (Schedule A-3)	372,824.05	
Reserve for Profits and Losses on Pool Investments	21,203.24	
		409,599.83
IV. Student Loan Funds:		
Balance (Schedule A-4)		21,003.50
V. Trust Funds:		
Balance in Funds		
Scholarship Fund	15,605.41	
Campus Activities	180,947.52	
Research Funds	181,706.06	
		378,258.99
VI. Agency Funds:		
Balance in Funds		
Student Deposit Accounts	9,299.85	
Student and Other Miscellaneous Funds	25,975.70	
		35,275.55
VII. Plant Funds		
Net Investment in Plant		17,252,527.97
Total Liabilities		$18,828,411.92

Schedule B

SUMMARY OF RECEIPTS

I. State Appropriations				
General Maintenance (Schedule B-1)		$7,066,958.00		
Other Maintenance:				
Balance, July 1, 1956	$ 37,676.20			
Current Year Appropriation (Schedule B-1)	57,450.00			
		95,126.20		
Less: Balances reverted to State Treasurer	52,497.29			
Less: Receipts paid to State Treasurer (Schedule B-4)	2,038,286.20			
		2,090,783.49		
			5,071,300.71	
Capital Outlay				
Balance, July 1, 1956		9,548.40		
Less: Balances reverted to State Treasurer		3,445.95		
			6,102.45	
Special Appropriations				
Current Year Appropriations (Schedule B-2)			125,000.00	
Net Total				5,202,403.16
II. Federal Appropriations – (Schedule B-5)				
Balance, July 1, 1956		91,340.93		
Current Year Receipts		936,744.04		
Total				1,028,084.97
Net Total State & Federal Appropriations				6,230,488.1
III. Endowment Fund Income				
Balance, July 1, 1956				15,339.31
University Endowment Fund Income				13,285.80
State Endowment Fund Income				2,505.06
Total				31,130.1
IV. Revolving Student Loan Funds				
Balance, July 1, 1956				14,778.65
Interest Income				181.57
Addition to Fund				6,043.28
Total				21,003.5
V. Revolving Trust Funds – (Schedule B-6)				
Balance, July 1, 1956				224,318.12
Current Year Receipts				925,385.42
Total				1,149,703.5
VI. Agency Funds – (Schedule B-7)				
Balance, July 1, 1956				30,932.54
Current Year Receipts				429,452.98
Total				460,385.5
VII. Special Gifts – (Schedule B-8)				
Balance, July 1, 1956				118,949.78
Scholarships				20,434.11
Research Grants				258,746.95
Total				398,130.8
Net Total Receipts				$8,290,841.7

Schedule B (Continued)

SUMMARY OF EXPENDITURES

		State Funds	Federal Funds	Other Funds	Total
II. State and Federal Funds:					
A. Administration		268,283.37			
B. Resident Instruction	3,272,603.18				
Less: Receipts paid to State Treasurer	517,408.48	2,755,194.70	111,899,59		
C. Experiment Station	612,014.08				
Less: Receipts paid to State Treasurer	6,228.75	605,785.33	375,708.22		
D. Control Services	354,219.40				
Less: Receipts paid to State Treasurer	126,136.70	228,082.70			
E. Extension Services	371,253.85				
Less: Receipts paid to State Treasurer	600.60	370,653.25	424,805.36		
F. Boarding Halls	588,235.59				
Less: Receipts paid to State Treasurer	656,209.50	– 67,973.91			
G. Operation of Plant	1,547,878.78				
Less: Receipts paid to State Treasurer	674,835.67	873,043.11			
H. Other Maintenance	55,850.95				
Less: Receipts paid to State Treasurer	56,866.50	– 1,015.55			
I. Capital Outlay Construction & Equipment (Schedule B-9)		3,059.45			
J. Special Appropriation		100,081.07			
Net Totals – State and Federal Expenditures		5,135,193.52	912,413.17		6,047,606.69
Balances, State and Federal Funds, June 30, 1957		67,209.64	115,671.80		182,881.44
Totals		5,202,403.16	1,028,084.97		6,230,488.13
III. Endowment Income:					
Balance, June 30, 1957				15,557.63	
Total				15,572.54	31,130.17
IV. Revolving Student Loan Funds:					
Balance, June 30, 1957					21,003.50
V. Revolving Trust Funds: (Schedule B-6)				968,756.02	
Balance, June 30, 1957				180,947.52	
Total					1,149,703.54
VI. Agency Funds: (Schedule B-7)				425,109.97	
Balance, June 30, 1957				35,275.55	460,385.52
VII. Special Gifts: (Schedule B-8)					
Scholarships and Loans				13,876.68	
Research Grants				186,942.69	
Balance, June 30, 1957				197,311.47	
Total					398,130.84
Net Total Expenditures and Balances					$8,290,841.70

Schedule A-1

Endowment Funds - Principal
Statement of Pool Investments
as of June 30, 1957

Description	Date of Acquisition	Cost or Book Value
Government Bonds		
32,700 U. S. Savings Bonds, Series G, 2½'s due 3/1/58	3/12/46	$32,700.00
5,000 U. S. Savings Bonds, Series G, 2½'s due 7/1/58	7/19/46	5,000.00
23,500 U. S. Savings Bonds, Series K, 2.76% due 6/1/64	6/30/52	23,500.00
18,000 U. S. Treasury 3 1/4's due June 15, 1983/78	12/31/56	17,703.31
500 U. S. Savings Bonds, Series G, 2½'s due 1/1/57	1/20/45	500.00
Total - Government Bonds		$79,403.31

		Date of Acquisition	Years Remaining	Principal	Present Value
Mortgages					
Massachusetts Beta House Corp.	4%	12/20/46	13	$ 8,500.00	$ 5,000.0(
Gamma Delta Chapter of Kappa Sigma	4%	10/14/46	9	24,000.00	13,795.0(
Massachusetts Kappa Corp. of Sigma Alpha Epsilon	4%	11/1/51	14	20,000.00	15,000.0(
Phi Lambda Tau, Inc., The Tau Pi Chapter of Tau Epsilon Tau	4%	1/6/47	Demand	7,500.00	1,833.0
Theta Corporation of Theta Chi	4%	10/9/54	16	40,000.00	35,000.0(
Total - Mortgages				$100,000.00	$70,628.1

Schedule A-1 (Continued)

Endowment Funds - Principal
Statement of Pool Investments
as of June 30, 1957

	Description		Date of Acquisition	Cost or Book Value	Market Value
Railroad Bonds					
3,000	Pennsylvania R. R. Co., Gen. 4½'s due 6/1/65		1939	$3,000.00	$2,955.00
3,000	Southern Pacific (Oregon Lines) First, 4½'s due 3/1/77		1951	2,977.50	2,760.00
	Total - Railroad Bonds			$5,977.50	$5,715.00
Utility Bonds					
5,000	Southern California Edison Co., 1st & Ref. 3's due 9/1/65	3,000 2,000	1951 1941	$5,050.89	$4,625.00

Schedule A-1 (Continued)

Endowment Funds - Principal
Statement of Pool Investments
as of June 30, 1957

No. of Shares	Description		Date of Acquisition	Cost or Book Value	Market Value
	Preferred Stock				
200	American Sugar Refining Co.	7%	7/19/51	$ 6,450.00	$ 6,325.0
80	Duquesne Light Company	4%	1/23/53	3,840.00	2,790.0
	Total - Preferred Stock			10,290.00	9,115.0
	Common Stock				
300	Amalgamated Oils, Limited			1.00*	--
100	American Surety Co. of N. Y.	25	7/19/51		
		75	6/7/56	1,300.00	1,875.0
91	American Tel. & Tel. Co.	45	7/19/51		
		15	7/30/52		
		6	12/16/53		
		17	11/5/55		
		8	11/6/56	13,422.27	15,811.2
200	Baltimore Gas & Electric		4/25/57	7,014.76	6,800.0
52	Commonwealth Edison		7/19/51	1,418.00	2,203.5
100	E. I. DuPont de Nemours Co.		7/19/51	9,425.00	19,250.0
80	Fire Association of Philadelphia	36	7/19/51		
		36	2/26/54		
		8	11/6/56	2,991.07	3,280.0
173	Hartford Electric Light Co.		1/8/54	9,564.68	9,428.5
15	Northern Illinois Gas Co.		5/6/55	192.79	273.7
200	Niagara Mohawk Power		4/25/57	6,135.38	5,875.0
500	Paramount Pictures		3/6/57	13,875.00	17,562.5
100	Standard Oil Co. of Indiana	50	7/19/51		
		50	12/6/54	3,518.75	5,287.5
274	Standard Oil Co. of New Jersey	90	7/19/51		
		1	11/6/53		
		182	5/6/56		
		1	12/26/56	6,006.00	18,084.0
200	Southern Company		4/25/57	4,577.62	4,800.0
200	Tri-Continental Corp.		3/6/57	5,300.00	6,500.0
75	United Fruit		7/19/51	5,100.00	3,375.0
740	Virginia Electric & Power Co.	337	1/8/54		
		33	12/6/54	10,541.02	17,390.0
	Total - Common Stock			$100,383.34	$137,796.0

*Company in process of liquidation.

Statement of Investment not in Pool Fund

750	David Buttrick	7%	3/8/54	$7,500.00

Schedule A-1 (Continued)

Endowment Funds - Principal
as of June 30, 1957

Summary of Pool Investments

Invested in:		Book Value	% of Total Book Value
Bonds			
Government		$79,403.31	20.5
Railroad		5,977.50	1.5
Utility		5,050.89	1.3
		90,431.70	23.3
Mortgages		70,628.11	18.3
Stocks			
Preferred			
Industrial		6,450.00	1.6
Utility		3,840.00	1.0
		10,290.00	2.6
Common			
Financial		4,291.07	1.1
Industrial		37,925.75	9.8
Investment Trust		5,300.00	1.3
Utilities		52,866.52	13.6
		100,383.34	25.8
	Total - Pool Securities	$271,733.15	70.0
Cash			
Amherst Savings Bank	@ 3%	56,332.56	14.5
Easthampton Savings Bank	@ 3%	17,300.00	4.4
Ware Savings Bank	@ 3 1/4%	40,913.83	10.5
Uninvested Cash		247.75	.6
	Total - Cash	114,794.14	30.0
	Total - Pool Investment	$386,527.29	100.0

Summary of Investments not in Pool

Preferred Stock	$7,500.00
Total - Endowment Fund	$394,027.29

Schedule A-2

Endowment Fund Income
Statement of Receipts and Expenditures

Name and Purpose of Fund	Unexp. Bal. July 1, 1956	Receipts from Investments	Expend.	Unexp. Bal. June 30, 195
Income Designated for General Purposes, Student Aid, Scholarships, Loans:				
Alpha Sigma Phi Scholarship	$ 132.93	$ 273.60	$ 200.00	$ 206.53
Alvord Dairy	96.49	161.71	170.00	88.20
Ascension Farm School	1,697.44	4,623.22	3,700.00	2,620.66
Danforth Keyes Bangs	115.17	225.88	215.00	126.05
Buttrick Scholarship	195.81	621.34	510.76	306.39
Lucius Clapp	83.81	336.80	230.00	190.61
Class 1882 Scholarship	9.86	49.90	46.45	13.31
Frederick G. Crane	249.67	983.32	700.00	532.99
Stephen Davis Scholarship	---	---	---	---
George L. Farley	383.04	192.67	---	575.71
Gassett Scholarship	14.98	56.34	40.00	31.32
Charles A. Gleason	40.36	143.81	100.00	84.17
Walter H. Harrison	---	456.11	456.11	---
Clarence C. Hardy	6.48	4.62	---	11.10
Helen E. Knowlton	---	---	---	---
Porter L. Newton Educational	758.03	932.70	1,180.00	510.73
Betsey C. Pinkerton	43.36	173.40	---	216.76
Charles S. Plumb	477.60	122.13	61.07	538.66
Frank H. Plumb	284.30	517.42	555.00	246.72
V. A. Rice Scholarship	48.67	101.38	---	150.05
Mary Robinson	---	100.39	100.39	---
Whiting Street	19.43	77.90	55.00	42.33
Helen A. Whittier	95.32	128.64	150.00	73.96
	4,752.75	10,283.28	8,469.78	6,566.25
Prizes:				
Grinnell Prize	51.27	4.86	---	56.13
Elizabeth L. McNamara	---	38.53	38.53	---
Allan Leon Pond	13.94	28.70	32.57	10.07
Betty Steinbugler	42.42	7.70	---	50.12
	107.63	79.79	71.10	116.32
Books:				
Oscar G. Anderson Memorial	91.18	39.11	---	130.29
John C. Cutter	142.63	42.32	---	184.95
Library	98.89	433.04	511.71	20.22
Robert F. Pomeroy Library	188.17	59.23	---	247.40
	520.87	573.70	511.71	582.86
Miscellaneous Purposes:				
George H. Barber	455.80	195.53	---	651.33
Hills	783.96	598.21	464.26	917.91
Guy Chester Crampton	621.45	97.84	23.61	695.68
J. D. W. French	1,334.25	414.00	105.11	1,643.14
William Proctor	273.45	77.07	---	350.52
	3,468.91	1,382.65	592.98	4,258.58
General Purposes (Unrestricted):				
Burnham Emergency	168.18	298.34	368.12	98.40
Frederick H. Read	18.11	65.49	50.00	33.60
William R. Sessions	45.73	184.22	183.74	46.21
William Wheeler	120.64	418.33	392.94	146.03
	352.66	966.38	994.80	324.24
State Endowment	6,136.49	2,505.06	4,917.26	3,724.29
Total	$15,339.31	15,790.86	15,557.63	15,572.54

Schedule A-3

Statement of Endowment Fund Principal

Name of Fund	Balance July 1, 1956	Additions	Balance June 30, 1957
Alpha Sigma Phi Scholarship	$ 7,100.00	$	$ 7,100.00
Alvord Dairy	4,197.15		4,197.15
Oscar G. Anderson Memorial	1,015.00		1,015.00
Ascension Farm School	119,975.79		119,975.79
Danforth Keyes Bangs	5,861.58		5,861.58
George H. Barber	5,073.86		5,073.86
Burnham Emergency	7,742.23		7,742.23
Buttrick Scholarship	10,000.00		10,000.00
Lucius Clapp	8,740.42		8,740.42
Class 1882 Scholarship	1,302.52	26.45	1,328.97
Guy Chester Crampton Research	2,539.03		2,539.03
Frederick G. Crane	25,518.08		25,518.08
John C. Cutter	1,098.41		1,098.41
Stephen Davis Scholarship	---	19,175.00	19,175.00
George L. Farley	5,000.00		5,000.00
J. D. W. French	10,743.41		10,743.41
Gassett Scholarship	1,462.20		1,462.20
Charles A. Gleason	3,731.73		3,731.73
Grinnell Prize	125.94		125.94
Clarence C. Hardy	119.65		119.65
Walter H. Harrison Loan	11,836.14		11,836.14
Hills	15,523.89		15,523.89
Helen E. Knowlton	---	15,000.00	15,000.00
Library	10,978.10		10,978.10
Elizabeth L. McNamara	1,000.00		1,000.00
Porter L. Newton Educational	24,204.46		24,204.46
Betsey C. Pinkerton	4,500.00		4,500.00
Charles S. Plumb	3,187.96	61.07	3,249.03
Frank H. Plumb	13,427.17		13,427.17
Robert F. Pomeroy Library	1,535.95		1,535.95
Allan Leon Pond	744.78		744.78
William Proctor	2,000.00		2,000.00
Frederick H. Read	1,699.55		1,699.55
V. A. Rice Scholarship	2,600.00	44.11	2,644.11
Mary Robinson	2,635.23	100.39	2,735.62
William R. Sessions	4,780.97		4,780.97
Betty Steinbugler	200.00		200.00
William Wheeler	10,855.91		10,855.91
Whiting Street Scholarship	2,021.70		2,021.70
Helen A. Whittier	3,338.22		3,338.22
Endowment from State (Principal of $142,000 held by State Treasurer)	---		---
Total	$338,417.03	$34,407.02	$372,824.05

Schedule A-4

Statement of Student Loan Funds

Fund	Balance in Fund June 30, 1957	Loans Outstanding July 1, 1956	Loans Made	Loans Repaid	Loans Outstanding June 30, 1957
D. K. Bangs	$ 5,894.49	$2,983.48	$11,197.00	$11,266.23	$2,914.25
Vincent Goldthwait	7,037.55	3,502.00	8,461.00	9,098.03	2,864.97
Walter H. Harrison	456.11	---	200.00	---	200.00
Murray D. Lincoln	5,046.07	---	900.00	300.00	600.00
M. A. C. Club	598.05	200.00	490.00	290.00	400.00
Elizabeth L. McNamara	77.29	---	---	----	---
New England Society of New York	500.00	---	1,053.00	955.00	98.00
Sievers Memorial Fund	1,393.94	400.00	200.00	150.00	450.00
Totals	$21,003.50	$7,085.48	$22,501.00	$22,059.26	$7,527.22
Lotta Crabtree*		$1,140.00	$8,316.00	$7,196.00	$2,260.00

*This fund is administered by the Trustees of Estate of Lotta M. Crabtree and loans are handled through the University.

$30,817.00 was loaned during the year to 297 students at an average loan of $103.76.

Schedule B-1

State Appropriations

Comparative Statement by Subsidiary Accounts

Code		1955	1956	1957
	General Maintenance - 1350-01			
01	Salaries, Permanent Positions	$3,814,305.00	$4,003,610.00	$4,420,140.00
02	Salaries, Other	570,000.00	491,851.41	616,692.00
03	Services, Non-Employees	236,000.00	240,500.00	282,470.00
04	Food for Persons	358,700.00	351,100.00	326,550.00
05	Clothing	1,115.00	1,495.00	550.00
06	Housekeeping Supplies & Expenses	43,000.00	44,000.00	45,000.00
07	Laboratory, Medical & General Care	103,500.00	3,625.00	3,500.00
08	Heat and Other Plant Operations	224,000.00	253,950.00	282,000.00
09	Farm and Grounds	75,000.00	73,450.00	71,500.00
10	Travel and Automotive Expenses	65,000.00	65,500.00	71,800.00
11	Advertising and Printing	35,000.00	44,150.00	40,450.00
12	Repairs, Alterations & Additions	139,500.00	195,870.00	197,800.00
13	Special Supplies and Expenses	3,350.00	118,050.00	110,984.00
14	Office and Administrative Expenses	79,200.00	80,500.00	94,300.00
15	Equipment	121,071.86	84,083.00	61,391.00
16	Rentals	294,330.00	327,330.00	440,285.00
18	Special Outlay	---	342.59	1,546.00
		$6,163,071.86	6,379,407.00	7,066,958.00*
	Other Maintenance:			
304-44	Wildlife Cooperative Unit	6,250.00	6,250.00	7,450.00**
50-21-00	Research with Federal Grants	---	50,000.00	50,000.00**
	Special Appropriations	25,000.00	37,000.00	125,000.00**
		$6,194,321.86	6,472,657.00	7,249,408.00

*Authorized under Chapter 501 of the Acts of 1956, $6,469,767.00,
$250,000 under Chapter 688 of the Acts of 1956,
$328,000 under Chapter 729 of the Acts of 1956 and
$19,191 was transferred from other funds.

**Authorized under Chapter 501 of the Acts of 1956 and
Chapter 711 of the Acts of 1956.

Schedule B-2

Special Appropriations

1350-96-13	For Certain Scholarships	$ 25,000.00	- Chapter 501 of the Acts of 1956.
8357-36	Equipment	100,000.00	- Chapter 711 of the Acts of 1956.

Schedule B-3

Capital Outlay Appropriations*

Item	Project	Amount of Appropriation	
8258-04 U-802	Construction of a Liberal Arts Bldg.	$416,000.00	
8256-05 U-602	Construction of an Addition to Chemistry Laboratory	500,000.00	
		$916,000.00	Chapt. 485 of the Acts of 1957
8258-34	Acquisition of Certain Land with buildings thereon	150,000.00	
8258-35 U-702	For Certain Improvements and Additions to the Power Plant & the Utility System	950,000.00	
8258-36 U-57-1	Construction of a Science Building	2,734,000.00	
8258-37 U-58-3	Grading and Improvement of Certain Land for Physical Education Playing Fields	162,000.00	
8258-38 U-58-2	Preparation of Plans for School of Education & Laboratory Practice School	92,000.00	
8258-39 U-58-4	Preparation of Plans for an Infirmary	60,000.00	
8258-40 U-58-5	Preparation of Plans for Engineering Shops	45,000.00	
8258-41 U-58-1	Preparation of Plans for a Maintenance Bldg.	18,000.00	
8258-42 U-58-6	Plans for a Cold Storage Laboratory	23,000.00	
		4,234,000.00	Chapt. 763 of the Acts of 1957
	GRAND TOTAL	$5,150,000.00	

*Capital Outlay Appropriations are under the supervision and control of the State Division of Building Construction.

Schedule B-4

Comparative Statement of Funds forwarded to State Treasurer on account of Income from Fees, Sales, Services

	1955		1956		1957	
Instruction:						
Hospital	$ 245.50		$ 486.50		$ 430.50	
Tuition	437,683.27		429,713.06		441,905.21	
Tuition - Summer School	12,435.00		13,240.00		23,153.00	
Sales, Productive Enterprises	79,981.91		64,137.84		30,135.75	
Other Student Receipts	3,458.00		2,991.65		2,299.39	
Other Sales	3,130.03		4,353.99		6,033.33	
Meals Employees	519.00		507.00		513.00	
Reimbursement for Services Federal Government	15,758.85		12,862.85		12,938.30	
		553,211.56		528,292.89		517,408.48
Extension Services:						
Miscellaneous		645.40		417.85		600.60
Experiment Station:						
Sales	15,689.07		1,681.17		6,157.88	
Sales, Waltham Field Station	47.42		104.02		70.87	
		15,736.49		1,785.19		6,228.75
Control Services:						
Fertilizer Law	15,809.51		16,009.85		15,512.94	
Poultry Disease Law	53,375.40		60,202.76		51,197.35	
Dairy Glassware	991.53		1,387.56		960.53	
Commercial Feedstuffs	40,503.30		41,783.60		37,792.90	
Seed Law	1,168.45		1,327.55		1,352.43	
Dairy Cattle Certification	18,533.74		20,950.42		18,898.05	
Poultry Bronchitis	5,705.00		1,353.67		---	
Diagnostic Laboratory	956.25		1,075.75		422.50	
		137,043 18		144,091.16		126,136.70

Schedule B-4 (Continued)

Comparative Statement of Funds forwarded to State Treasurer
on account of Income from Fees, Sales, Services

	1955		1956		1957	
Operation of Plant:						
Students' Room Rent	$ 436,893.92		$448,942.42		$505,609.57	
Transient Rent	8,507.47		9,250.60		7,039.75	
Employees' Rent	67,201.08		67,851.01		69,206.59	
Other Rents	4,720.81		3,321.71		82,941.66	
Miscellaneous	191.20		174.83		1,292.51	
		517,514.48		529,540.57		666,090.08
Miscellaneous:						
Miscellaneous		5,956.57		5,880.45	8,745.59	
Research for Federal Grants		39,992.02		18,830.91	56,849.98	
Inland Fish and Game					16.52	
						65,612.09
Boarding Hall:						
Student Board	592,943.52		568,244.80		592,911.27	
Cafeteria	29,493.54		26,987.25		25,210.03	
Snack Bar	73,948.70		75,867.80		37,448.45	
Miscellaneous Sales	2,033.27		1,843.84		119.55	
Meals, Employees	1,131.00		762.00		520.20	
		699,550.03		673,705.69		656,209.50
Totals		$1,969,649.73		$1,902,544.71		$2,038,286.20

Schedule B-5

Federal Funds

Statement of Receipts, Disbursements and Balances

	Balance July 1, 1956	Receipts	Disbursements	Balance June 30, 1957
Instruction:				
Bankhead Jones	$ ---	$ 66,788.72	$ 66,788.72	$ ---
Land Grant	8,452.06	7,300.00	9,102.52	6,649.54
Morrill-Nelson	---	33,333.33	33,333.33	---
Smith-Hughes (Dept. of Educ.)	-204.00	2,525.07	2,675.02	-353.95
Total	8,248.06	109,947.12	111,899.59	6,295.59
Experiment Station:				
Hatch Amended	---	305,729.00	281,471.51	24,257.49
Regional Research	---	93,830.00	87,522.45	6,307.55
Research & Marketing	---	2,000.00	1,807.89	192.11
Liabilities	4,906.37	---	4,906.37	---
Total	4,906.37	401,559.00	375,708.22	30,757.15
Extension Service:				
Federal Smith Lever as Amended 1953	22,469.22	349,455.36	347,592.46	24,332.12
Research and Marketing	9,598.83	22,513.65	20,196.62	11,915.86
Sub-Total	32,068.05	371,969.01	367,789.08	36,247.98
Regional N. E. Contract No. 33726	4,594.95	-4,594.95	---	---
Regional Project 12-05-300-04	1,090.56	-1,071.15	19.41	---
Regional Project 12-05-300-08	112.55	6,558.60	4,666.48	2,004.67
Regional Project 12-05-300-11	28,534.93	39,344.50	40,111.84	27,767.59
Regional Project 12-05-300-12	11,785.46	13,031.91	12,218.55	12,598.82
Total	78,186.50	425,237.92	424,805.36	78,619.06
Grand Total	$ 91,340.93	$936,744.04	$912,413.17	$115,671.80

Schedule B-8

Special Gifts

Statement of Receipts, Disbursements and Balances

	Balance July 1, 1956	Receipts	Disbursements	Balance June 30, 195
Scholarships:				
Borden Agricultural	$1,800.00	$ ---	$ 300.00	$ 1,500.00
Charles M. Cox	---	300.00	300.00	---
Margaret Fitz Barnes	---	100.00	100.00	---
N. I. Bowditch Speak. Contest	402.50	---	50.00	352.50
Engineering Alumni	1,356.69	1,053.50	1,000.00	1,410.19
French Government	284.00	150.00	150.00	284.00
Goldthwait	---	200.00	200.00	---
Holbrook	100.00	---	100.00	---
Hood	---	1,200.00	1,200.00	---
I.C.A.	2,040.79	266.00	1,509.18	797.61
Kollmorgen Scholarship	---	100.00	---	100.00
McDonald Prize	33.25	---	---	33.25
Mathematics Prize	---	1,000.00	1,000.00	---
National Merit	---	100.00	100.00	---
New England Hotel Association	100.00	50.00	150.00	---
New England Managers' Association	100.00	---	100.00	---
Elizabeth Pigeon	100.00	---	---	100.00
Point IV Fund	700.00	---	---	700.00
Sears Roebuck	---	1,450.00	1,450.00	---
Edna L. Skinner	---	115.00	100.00	15.00
University Scholarship Fund	2,030.75	13,112.50	6,067.50	9,075.75
L. R. Wilson Award	---	25.00	---	25.00
Vogue Dolls	---	327.50	---	327.50
New England Farm & Garden	---	384.61	---	384.61
Harold Jones	---	500.00	---	500.00
Totals - Scholarships	$9,047.98	$20,434.11	$13,876.68	$15,605.41
Research Grants & Fellowships:				
American Creosoting	$ 663.70	---	---	663.70
American Potash	450.67	1,500.00	510.49	1,440.18
P. Ballantine and Sons	423.84	---	397.62	26.22
F. A. Bartlett Tree Company	577.83	1,500.00	1,423.76	654.07
Bell Telephone Company	86.55	---	75.83	10.72
Beneficial Insect Fund	1,660.83	---	1,451.09	209.74
Boston Market Garden Seed Impts.	572.56	500.00	592.49	480.07
Charles M. Cox	820.78	1,600.00	1,981.72	439.06
Chinchilla	1,196.45	200.00	406.95	989.50
Commercial Solvents	---	500.00	28.00	472.00
Consumers Union	1,360.56	---	1,346.97	13.59
Cocoa Fund	---	2,000.00	462.29	1,537.71
James McKeen Cattell	987.05	---	867.58	119.47
Corning Glass	---	800.00	721.86	78.14
Dow Chemical	509.15	---	26.67	482.48
DuPont Company	---	400.00	400.00	---
Engineering	892.09	---	---	892.09
Esso Research and Engineering	89.40	---	79.67	9.73
Gardner	5.63	-5.63	---	---
Glass Container Assoc. of America	7,299.88	12,591.38	13,241.06	6,650.20

Schedule B-8 (Continued)

Special Gifts

Statement of Receipts, Disbursements and Balances

Research Grants & Fellowships:	Balance July 1, 1956	Receipts	Disbursements	Balance June 30, 1957
Glf	$ 276.35	$	$	$ 276.35
Gigy	334.12	25.00	260.24	98.88
Hod Foundation	2,866.51	---	2,759.32	107.19
Kpper's Company	22.38	---	---	22.38
Lderle Company	10,362.26	5,000.90	2,563.12	12,800.04
Ei Lilly Company	709.40	---	692.27	17.13
Lver Brothers	217.40	---	---	217.40
Mnsanto Chemical Company	1,076.45	---	---	1,076.45
Mttox Moore	321.74	9.00	40.77	289.97
Nrwich Pharmacal Company	3,083.63	4,200.00	4,583.18	2,700.45
Nchols Poultry Farm	55.54	---	51.76	3.78
Ntional Pest Control	1,861.61	705.00	842.08	1,724.53
Carles Pfizer Company	4.08	---	4.08	---
Prlite Institute	---	500.00	268.62	231.38
Ptroleum Fund	11,013.37	22.50	5,686.22	5,349.65
Prcupine Fund	2,069.68	119.46	2,095.11	94.03
Rfrigeration Research Corp.	152.01	---	93.77	58.24
Rin and Hail Insurance Co.	1,590.84	1,000.00	1,274.00	1,316.84
Rsearch Service	662.90	400.00	539.62	523.28
Rsearch Trust Funds	2,601.20	14,494.41	9,569.01	7,526.60
Rsearch Service - Science	.69	---	---	.69
Rsearch Corporation:				
Cottrell Grant - Roberts	43.40	-43.40	---	---
Cottrell Grant - Cannon	677.85	26.50	704.35	---
Cottrell Grant - Stein	242.12	-79.42	162.70	---
Cottrell Grant - Levitt	1,068.43	-8.57	1,059.86	---
Cottrell Grant - Carpino	1,973.19	190.02	1,324.00	839.21
Cottrell Grant - Little	2,194.01	---	14.40	2,179.61
Cottrell Grant - McWhorter	---	2,230.00	65.51	2,164.49
Rspiratory Disease - Mass. Society for Promoting Agric.	5,476.85	---	---	5,476.85
Sgma Xi Grant - Little	264.12	---	---	264.12
Sre Evaluation	2,051.20	4,000.00	5,991.82	59.38
Shawinigan - Chemical Engr.	410.91	1,550.00	693.97	1,266.94
Shawinigan - Chemistry	1,462.99	1,677.37	1,504.97	1,635.39
Surf Research	535.73	---	---	535.73
Vitamin	6.19	---	---	6.19
Wildlife Research Service	389.55	1,400.00	1,489.25	300.30
Lakepeace Fund	3,057.76	7,038.48	6,620.89	3,475.35
Teachers' Research	1,192.86	8,801.00	6,832.09	3,161.77
Assoc. of Cocoa & Chocolate Mfgrs.	---	---	---	---
Bureau of Gov't Research	---	747.00	218.99	528.01
Tramite	---	1,500.00	311.42	1,188.58
Butter Fat Fund	---	1,732.00	---	1,732.00
American Cyanamid	---	3,500.00	242.34	3,257.66
Nichols Inc. (C.R.D. Fund)	---	500.00	---	500.00
New York Farmer's Fund	---	1,000.00	---	1,000.00
Union Carbide	---	150.00	46.46	103.54
Stouffler Fund	---	300.00	---	300.00
Sub-Total	$77,926.29	84,273.00	82,620.24	79,579.05

Schedule B-8

Special Gifts

Statement of Receipts, Disbursements and Balances

	Balance July 1, 1956	Receipts	Disbursements	Balance June 30,
Scholarships:				
Borden Agricultural	$1,800.00	$ ---	$ 300.00	$ 1,500
Charles M. Cox	---	300.00	300.00	---
Margaret Fitz Barnes	---	100.00	100.00	---
N. I. Bowditch Speak. Contest	402.50	---	50.00	352
Engineering Alumni	1,356.69	1,053.50	1,000.00	1,410
French Government	284.00	150.00	150.00	284
Goldthwait	---	200.00	200.00	---
Holbrook	100.00	---	100.00	---
Hood	---	1,200.00	1,200.00	---
I.C.A.	2,040.79	266.00	1,509.18	797
Kollmorgen Scholarship	---	100.00	---	100
McDonald Prize	33.25	---	---	33
Mathematics Prize	---	1,000.00	1,000.00	---
National Merit	---	100.00	100.00	---
New England Hotel Association	100.00	50.00	150.00	---
New England Managers' Association	100.00	---	100.00	---
Elizabeth Pigeon	100.00	---	---	100.
Point IV Fund	700.00	---	---	700.
Sears Roebuck	---	1,450.00	1,450.00	---
Edna L. Skinner	---	115.00	100.00	15.
University Scholarship Fund	2,030.75	13,112.50	6,067.50	9,075.
L. R. Wilson Award	---	25.00	---	25.
Vogue Dolls	---	327.50	---	327.
New England Farm & Garden	---	384.61	---	384.
Harold Jones	---	500.00	---	500.
Totals - Scholarships	$9,047.98	$20,434.11	$13,876.68	$15,605.
Research Grants & Fellowships:				
American Creosoting	$ 663.70	---	---	663.
American Potash	450.67	1,500.00	510.49	1,440.
P. Ballantine and Sons	423.84	---	397.62	26.
F. A. Bartlett Tree Company	577.83	1,500.00	1,423.76	654.
Bell Telephone Company	86.55	---	75.83	10.
Beneficial Insect Fund	1,660.83	---	1,451.09	209.
Boston Market Garden Seed Impts.	572.56	500.00	592.49	480.
Charles M. Cox	820.78	1,600.00	1,981.72	439.
Chinchilla	1,196.45	200.00	406.95	989.
Commercial Solvents	---	500.00	28.00	472.
Consumers Union	1,360.56	---	1,346.97	13.
Cocoa Fund	---	2,000.00	462.29	1,537.
James McKeen Cattell	987.05	---	867.58	119.
Corning Glass	---	800.00	721.86	78.
Dow Chemical	509.15	---	26.67	482.
DuPont Company	---	400.00	400.00	---
Engineering	892.09	---	---	892.
Esso Research and Engineering	89.40	---	79.67	9.
Gardner	5.63	-5.63	---	---
Glass Container Assoc. of America	7,299.88	12,591.38	13,241.06	6,650.

Schedule B-8 (Continued)

Special Gifts

Statement of Receipts, Disbursements and Balances

	Balance July 1, 1956	Receipts	Disbursements	Balance June 30, 1957
Research Grants & Fellowships:				
Golf	$ 276.35	$	$	$ 276.35
Geigy	334.12	25.00	260.24	98.88
Hood Foundation	2,866.51	---	2,759.32	107.19
Kopper's Company	22.38	---	---	22.38
Lederle Company	10,362.26	5,000.90	2,563.12	12,800.04
Eli Lilly Company	709.40	---	692.27	17.13
Lever Brothers	217.40	---	---	217.40
Monsanto Chemical Company	1,076.45	---	---	1,076.45
Mattox Moore	321.74	9.00	40.77	289.97
Norwich Pharmacal Company	3,083.63	4,200.00	4,583.18	2,700.45
Nichols Poultry Farm	55.54	---	51.76	3.78
National Pest Control	1,861.61	705.00	842.08	1,724.53
Charles Pfizer Company	4.08	---	4.08	---
Perlite Institute	---	500.00	268.62	231.38
Petroleum Fund	11,013.37	22.50	5,686.22	5,349.65
Porcupine Fund	2,069.68	119.46	2,095.11	94.03
Refrigeration Research Corp.	152.01	---	93.77	58.24
Rain and Hail Insurance Co.	1,590.84	1,000.00	1,274.00	1,316.84
Research Service	662.90	400.00	539.62	523.28
Research Trust Funds	2,601.20	14,494.41	9,569.01	7,526.60
Research Service - Science	.69	---	---	.69
Research Corporation:				
Cottrell Grant - Roberts	43.40	-43.40	---	---
Cottrell Grant - Cannon	677.85	26.50	704.35	---
Cottrell Grant - Stein	242.12	-79.42	162.70	---
Cottrell Grant - Levitt	1,068.43	-8.57	1,059.86	---
Cottrell Grant - Carpino	1,973.19	190.02	1,324.00	839.21
Cottrell Grant - Little	2,194.01	---	14.40	2,179.61
Cottrell Grant - McWhorter	---	2,230.00	65.51	2,164.49
Respiratory Disease - Mass. Society for Promoting Agric.	5,476.85	---	---	5,476.85
Sigma Xi Grant - Little	264.12	---	---	264.12
Sire Evaluation	2,051.20	4,000.00	5,991.82	59.38
Shawinigan - Chemical Engr.	410.91	1,550.00	693.97	1,266.94
Shawinigan - Chemistry	1,462.99	1,677.37	1,504.97	1,635.39
Turf Research	535.73	---	---	535.73
Vitamin	6.19	---	---	6.19
Wildlife Research Service	389.55	1,400.00	1,489.25	300.30
Makepeace Fund	3,057.76	7,038.48	6,620.89	3,475.35
Teachers' Research	1,192.86	8,801.00	6,832.09	3,161.77
Assoc. of Cocoa & Chocolate Mfgrs.	---	---	---	---
Bureau of Gov't Research	---	747.00	218.99	528.01
Uramite	---	1,500.00	311.42	1,188.58
Butter Fat Fund	---	1,732.00	---	1,732.00
American Cyanamid	---	3,500.00	242.34	3,257.66
Nichols Inc. (C.R.D. Fund)	---	500.00	---	500.00
New York Farmer's Fund	---	1,000.00	---	1,000.00
Union Carbide	---	150.00	46.46	103.54
Stouffler Fund	---	300.00	---	300.00
Sub-Total	$77,926.29	84,273.00	82,620.24	79,579.05

Schedule B-8 (Continued)

Special Gifts

Statement of Receipts, Disbursements and Balances

	Balance July 1, 1956	Receipts	Disbursements	Balance June 30, 195
U. S. Atomic Energy Commission	$ 907.81	$ 2.86	$ 564.60	$ 346.07
U. S. Department of Agriculture: Agricultural Research	281.64	12,500.00	12,781.64	---
U. S. Department of Forestry	171.50	---	171.50	---
National Institutes of Health:				
National Institute of Mental Health	3,409.27	39,089.00	33,411.61	9,086.66
National Advisory Cancer Council	38.93	190.00	228.93	---
National Institute of Public Health	17,066.36	63,015.76	47,473.22	32,608.90
National Science Foundation	10,100.00	59,676.33	9,690.95	60,085.38
Sub-Total	31,975.51	174,473.95	104,322.45	102,127.01
Total - Research Grants	109,901.80	258,746.95	186,942.69	181,706.06
Total - Special Gifts	$118,949.78	279,181.06	200,819.37	197,311.47

Schedule B-9

Capital Outlay Appropriations

Statement of Receipts and Expenditures

Name	Approp. Previous Years	Expenditures Previous Years	Expenditures Current Year	Reverted to State Treasurer	Balance of Approp. June 30, 1957
Physics Building	$ 518,000.00	$ 517,800.94	$ ---	$ 199.06	$ ---
Disease Control Laboratory	553,000.00	552,911.75	---	88.25	---
Animal Disease Control Laboratory	111,000.00	109,029.23	1,284.80	685.97*	---
Physical Education Facilities	30,000.00	27,233.52	274.65	2,491.83**	---
Dining Hall	760,000.00	749,769.06	1,500.00	8,730.94***	---
Improvements of Physical Educ.	75,000.00	71,948.83	---	8.17	3,043.00
Totals	$2,047,000.00	2,028,693.33	3,059.45	12,204.22	3,043.00

* $285.97 reverted Previous Year.
** $2,491.83 reverted Previous Year.
*** $5,980.47 reverted Previous Year

Special Appropriations

Statement of Receipts and Expenditures

	Appropriation	Expenditure	Bal. of Approp. June 30, 1957
For Certain Scholarships	$ 25,000.00	$25,000.00	---
Equipment	100,000.00	75,081.07	24,918.93
Total	$125,000.00	$100,081.07	$24,918.93

Schedule C

Analysis of General Maintenance Appropriation
by Subsidiary Accounts

Code No.	Subsidiary Accounts	Appropriation	Available for Expenditures	Total Exp. and Encumbrances	Bal. of Approp. June 30, 195
01	Salaries, Perm. Positions	$4,420,140.00	$4,420,140.00	$4,396,017.52	$24,122.48
02	Salaries, Other	616,692.00	616,692.00	602,744.54	13,947.46
03	Services, Non-Employees	282,470.00	282,470.00	282,381.20	88.80
04	Food for Persons	326,550.00	326,550.00	318,961.25	7,588.75
05	Clothing	550.00	550.00	482.18	67.82
06	Housekeeping Supp. & Exp.	45,000.00	45,000.00	44,414.04	585.96
07	Lab., Med. & General Care	3,500.00	3,500.00	3,235.07	264.93
08	Heat and Other Plant Op.	282,000.00	282,000.00	281,937.88	62.12
09	Farm and Grounds	71,500.00	71,500.00	70,700.62	799.38
10	Travel & Auto. Exp.	71,800.00	71,800.00	71,644.25	155.75
11	Advertising & Printing	40,450.00	40,450.00	40,034.21	415.79
12	Reprs., Alt. & Adds.	197,800.00	197,800.00	195,174.95	2,625.05
13	Special Supplies & Exp.	110,984.00	110,984.00	110,579.18	404.82
14	Office & Admin. Exp.	94,300.00	94,300.00	93,316.20	983.80
15	Equipment	61,391.00	61,391.00	61,091.10	299.90
16	Rentals	440,285.00	440,285.00	440,228.60	56.40
18	Special Outlay	1,546.00	1,546.00	1,545.46	.54
	Totals	$7,066,958.00	7,066,958.00	7,014,488.25	52,469.75
	Other Maintenance				
3304-44	Wildlife Coop. Unit	$ 7,450.00	7,450.00	7,422.46	27.54*
1350-21	Research with Federal Grants	83,736.00	83,736.00	44,488.29	39,247.71**

*This item of $27.54 is to be reverted to the State Treasurer.

**This balance to be carried forward to 1958.

Schedule D

Summary of State General Maintenance
and Federal Appropriation Receipts

	State	Federal	Total	% of Total
Administration	$ 272,840.00	$ ---	$ 272,840.00	3.4
Instruction	3,280,124.00	109,947.12	3,390,071.12	42.4
Extension Service	375,167.00	425,237.92*	800,404.92	10.1
Experiment Station	631,190.00	401,559.00	1,032,749.00	12.9
Control Services	358,910.00	---	358,910.00	4.5
Operation of Plant	1,564,717.00	---	1,564,717.00	19.5
Boarding Hall	584,010.00		584,010.00	7.2
Totals	$7,066,958.00	$936,744.04	$8,003,702.04	100.0

*This includes $53,268.91 for New England Regional Projects.

Schedule G

Fiscal Year Expenditure Summary
By Budget Divisions and Departments

Dept. Code		State Funds Salaries and Wages	State Funds Other Expenditures	Other Funds Salaries and Wages*	Net Total
A	Executive Order:				
A 11	Trustees	$	$ 758.57	$	$ 758.57
A 12	President's Office	23,571.14	7,748.54		31,319.68
A 13	Secretary's Office	13,538.85	62.57		13,601.42
A 14	Alumni Office	12,034.03	500.60		12,534.63
A 15	Publications	10,350.08	14,146.83		24,496.91
	Totals	59,494.10	23,217.11		82,711.21
B 11	Financial Management	101,320.40	17,657.46	5,718.26	124,696.12
C 11	Business Management	65,464.28	1,130.02		66,594.30
E	Provost's Office:				
E 11	Provost's Office	17,702.95	544.15		18,247.10
E 12	Admissions & Registrar	43,815.39	5,275.20	225.60	49,316.19
	Totals	61,518.34	5,819.35	225.60	67,563.29
F	Student Personnel:				
F 22	Dean of Men	24,335.04	1,757.64		26,092.68
F 23	Dean of Women	40,715.22	648.71		41,363.93
F 24	Placement Office	43,924.93	2,073.41		45,998.34
F 25	Student Health	55,326.08	4,650.70		59,976.78
F 26	Guidance Service	11,067.45	2,354.49		13,421.94
F 27	Faculty Proctors	14,277.17			14,277.17
	Totals	189,645.89	11,484.95		201,130.84
G 11	Library	65,754.08	38,066.36		103,820.44
H 11	Audio Visual Center	13,618.87	5,475.38	103.00	19,197.25
J	College of Arts & Science:				
J 11	Dean's Office	13,795.31	3,326.44		17,121.75
J 12	Economics	51,164.33	609.41		51,773.74
J 13	Education	2,218.32		163.20	2,381.52
J 14	English	166,409.41	1,578.83	2,261.00	170,249.24
J 16	German	32,379.40	494.90	8.50	32,882.80
J 17	Government	35,895.93	328.90	3,417.27	39,642.10
J 18	History	67,037.82	766.46	209.00	68,013.28
J 19	Music	18,701.85	1,662.77	1,055.50	21,420.12
J 20	Philosophy	17,418.89	466.54		17,885.43
J 21	Psychology	56,441.85	1,398.38	24,224.03	82,064.26
J 22	Recreation	2,244.35			2,244.35
J 23	Romance Languages	71,816.20	598.04	1,725.82	74,140.06
J 24	Sociology	40,469.36	456.47		40,925.83
J 25	Speech	34,205.37	165.68	100.00	34,471.05
J 32	Public Health	57,015.59	4,027.74	10,994.03	72,037.36

Schedule G (Continued)

Fiscal Year Expenditure Summary
By Budget Divisions and Departments

pt. de		State Funds Salaries and Wages	State Funds Other Expenditures	Other Funds Salaries and Wages	Net Total
	College of Arts & Science:				
33	Botany	$ 38,505.11	$ 2,215.98	$ 7,089.99	$ 47,811.08
34	Chemistry	103,882.39	11,577.52	38,514.85	153,974.76
35	Entomology	49,197.79	1,446.21	5,137.92	55,781.92
36	Geology & Mineralogy	41,215.50	2,739.39	1,370.92	45,325.81
37	Mathematics	88,126.58	763.37	8,299.49	97,189.44
38	Physics	54,841.07	1,590.56	7,824.30	64,255.93
39	Zoology	71,761.01	7,181.93	27,122.33	106,065.27
	Totals	1,114,743.43	43,395.52	139,518.15	1,297,657.10
	College of Agriculture:				
	(Instruction)				
01	Dean of College	21,571.66	2,292.94		23,864.60
02	Agricul. Communications	5,750.94	180.90		5,931.84
03	Agricul. Economics	26,255.70	205.53	2,649.74	29,110.97
04	Agricul. Engineering	27,476.46	2,032.64		29,509.10
05	Agronomy	44,001.16	627.74	2,409.31	47,038.21
06	Dairy & Animal Science	63,542.04	3,998.96		67,541.00
08	Farm Service	203,524.41	55,919.26	995.27	260,438.94
09	Floriculture	25,484.52	970.87		26,455.39
10	Food Technology	36,168.19	1,716.97	28,815.37	66,700.53
11	Forestry	46,557.05	2,292.76	13,534.21	62,384.02
12	Landscape Architecture	49,773.25	1,069.55	1,890.00	52,732.80
13	Olericulture	23,788.99	283.27	605.00	24,677.26
14	Pomology	26,224.01	291.97		26,515.98
15	Poultry	31,747.73	11,201.76	1,799.72	44,749.21
16	Veterinary Science	9,153.86		452.85	9,606.71
	Sub-Totals	641,019.97	83,085.12	53,151.47	777,256.56
	(Extension Service)				
21	Director's Office	22,683.22	372.35	127,538.44	150,594.01
22	Agricul. Communications	38,108.07	10,489.50	35,650.70	84,248.27
23	Agricul. Economics	38,475.34	3,959.58	29,112.53	71,547.45
24	Agricul. Engineering		302.44		302.44
25	Agronomy	11,603.30	538.23	2,529.40	14,670.93
26	Dairy & Animal Science	28,802.09	1,757.70	3,321.99	33,881.78
27	Botany	8,957.99	399.53		9,357.52
28	Cranberry Station	9,516.00	441.79		9,957.79
29	Entomology	11,616.86	436.27	508.74	12,561.87
30	Floriculture		954.91		954.91
31	Food Technology	8,048.95			8,048.95
32	Forestry	6,599.37	580.85	1,857.51	9,037.73
33	4-H	30,662.68	1,879.58	13,365.47	45,907.73
34	Home Economics	57,750.80	3,863.62	17,544.87	79,159.29
35	Landscape Architecture	9,637.80	470.88	2,459.60	12,568.28
36	Olericulture	9,594.00	603.75	780.00	10,977.75
37	Pomology	5,977.26	661.51		6,638.77
38	Poultry	8,192.44	867.39	294.91	9,354.74
39	Veterinary Science	10,126.41	784.82	2,870.70	13,781.93
40	Waltham Field Station	13,901.60	137.69	291.81	14,331.10
41	Ext. Div. of Agriculture	10,774.59	722.69	11,153.94	22,651.22
	Sub-Totals	341,028.77	30,225.08	249,280.61	620,534.46

Schedule G

Fiscal Year Expenditure Summary
By Budget Divisions and Departments

Dept. Code		State Funds Salaries and Wages	State Funds Other Expenditures	Other Funds Salaries and Wages*	Net T
A	Executive Order:				
A 11	Trustees	$	$ 758.57	$	$ 758
A 12	President's Office	23,571.14	7,748.54		31,319
A 13	Secretary's Office	13,538.85	62.57		13,601
A 14	Alumni Office	12,034.03	500.60		12,534
A 15	Publications	10,350.08	14,146.83		24,496
	Totals	59,494.10	23,217.11		82,711
B 11	Financial Management	101,320.40	17,657.46	5,718.26	124,696
C 11	Business Management	65,464.28	1,130.02		66,594
E	Provost's Office:				
E 11	Provost's Office	17,702.95	544.15		18,247
E 12	Admissions & Registrar	43,815.39	5,275.20	225.60	49,316
	Totals	61,518.34	5,819.35	225.60	67,563.
F	Student Personnel:				
F 22	Dean of Men	24,335.04	1,757.64		26,092.
F 23	Dean of Women	40,715.22	648.71		41,363.
F 24	Placement Office	43,924.93	2,073.41		45,998.
F 25	Student Health	55,326.08	4,650.70		59,976.
F 26	Guidance Service	11,067.45	2,354.49		13,421.
F 27	Faculty Proctors	14,277.17			14,277.
	Totals	189,645.89	11,484.95		201,130.
G 11	Library	65,754.08	38,066.36		103,820.
H 11	Audio Visual Center	13,618.87	5,475.38	103.00	19,197.
J	College of Arts & Science:				
J 11	Dean's Office	13,795.31	3,326.44		17,121.
J 12	Economics	51,164.33	609.41		51,773.
J 13	Education	2,218.32		163.20	2,381.
J 14	English	166,409.41	1,578.83	2,261.00	170,249.
J 16	German	32,379.40	494.90	8.50	32,882.
J 17	Government	35,895.93	328.90	3,417.27	39,642.
J 18	History	67,037.82	766.46	209.00	68,013.
J 19	Music	18,701.85	1,662.77	1,055.50	21,420.
J 20	Philosophy	17,418.89	466.54		17,885.
J 21	Psychology	56,441.85	1,398.38	24,224.03	82,064.
J 22	Recreation	2,244.35			2,244.
J 23	Romance Languages	71,816.20	598.04	1,725.82	74,140.
J 24	Sociology	40,469.36	456.47		40,925.
J 25	Speech	34,205.37	165.68	100.00	34,471.
J 32	Public Health	57,015.59	4,027.74	10,994.03	72,037.

Schedule G (Continued)

Fiscal Year Expenditure Summary
By Budget Divisions and Departments

Dept. Code		State Funds Salaries and Wages	State Funds Other Expenditures	Other Funds Salaries and Wages	Net Total
J	College of Arts & Science:				
J 33	Botany	$ 38,505.11	$ 2,215.98	$ 7,089.99	$ 47,811.08
J 34	Chemistry	103,882.39	11,577.52	38,514.85	153,974.76
J 35	Entomology	49,197.79	1,446.21	5,137.92	55,781.92
J 36	Geology & Mineralogy	41,215.50	2,739.39	1,370.92	45,325.81
J 37	Mathematics	88,126.58	763.37	8,299.49	97,189.44
J 38	Physics	54,841.07	1,590.56	7,824.30	64,255.93
J 39	Zoology	71,761.01	7,181.93	27,122.33	106,065.27
	Totals	1,114,743.43	43,395.52	139,518.15	1,297,657.10
K	College of Agriculture:				
	(Instruction)				
K 01	Dean of College	21,571.66	2,292.94		23,864.60
K 02	Agricul. Communications	5,750.94	180.90		5,931.84
K 03	Agricul. Economics	26,255.70	205.53	2,649.74	29,110.97
K 04	Agricul. Engineering	27,476.46	2,032.64		29,509.10
K 05	Agronomy	44,001.16	627.74	2,409.31	47,038.21
K 06	Dairy & Animal Science	63,542.04	3,998.96		67,541.00
K 08	Farm Service	203,524.41	55,919.26	995.27	260,438.94
K 09	Floriculture	25,484.52	970.87		26,455.39
K 10	Food Technology	36,168.19	1,716.97	28,815.37	66,700.53
K 11	Forestry	46,557.05	2,292.76	13,534.21	62,384.02
K 12	Landscape Architecture	49,773.25	1,069.55	1,890.00	52,732.80
K 13	Olericulture	23,788.99	283.27	605.00	24,677.26
K 14	Pomology	26,224.01	291.97		26,515.98
K 15	Poultry	31,747.73	11,201.76	1,799.72	44,749.21
K 16	Veterinary Science	9,153.86		452.85	9,606.71
	Sub-Totals	641,019.97	83,085.12	53,151.47	777,256.56
	(Extension Service)				
K 21	Director's Office	22,683.22	372.35	127,538.44	150,594.01
K 22	Agricul. Communications	38,108.07	10,489.50	35,650.70	84,248.27
K 23	Agricul. Economics	38,475.34	3,959.58	29,112.53	71,547.45
K 24	Agricul. Engineering		302.44		302.44
K 25	Agronomy	11,603.30	538.23	2,529.40	14,670.93
K 26	Dairy & Animal Science	28,802.09	1,757.70	3,321.99	33,881.78
K 27	Botany	8,957.99	399.53		9,357.52
K 28	Cranberry Station	9,516.00	441.79		9,957.79
K 29	Entomology	11,616.86	436.27	508.74	12,561.87
K 30	Floriculture		954.91		954.91
K 31	Food Technology	8,048.95			8,048.95
K 32	Forestry	6,599.37	580.85	1,857.51	9,037.73
K 33	4-H	30,662.68	1,879.58	13,365.47	45,907.73
K 34	Home Economics	57,750.80	3,863.62	17,544.87	79,159.29
K 35	Landscape Architecture	9,637.80	470.88	2,459.60	12,568.28
K 36	Olericulture	9,594.00	603.75	780.00	10,977.75
K 37	Pomology	5,977.26	661.51		6,638.77
K 38	Poultry	8,192.44	867.39	294.91	9,354.74
K 39	Veterinary Science	10,126.41	784.82	2,870.70	13,781.93
K 40	Waltham Field Station	13,901.60	137.69	291.81	14,331.10
K 41	Ext. Div. of Agriculture	10,774.59	722.69	11,153.94	22,651.22
	Sub-Totals	341,028.77	30,225.08	249,280.61	620,534.46

Schedule G (Continued)

Fiscal Year Expenditure Summary
By Budget Divisions and Departments

Dept. Code		State Funds Salaries and Wages	State Funds Other Expenditures	Other Funds Salaries and Wages*	Net Total
K	College of Agriculture: (Experiment Station)				
K 51	Director's Office	$ 24,243.99	$ 314.61	$ 2,615.23	$ 27,173.83
K 52	Agricul. Communications	12,961.90	5,447.92		18,409.82
K 53	Agricul. Economics	34,791.71	24.28	40,098.11	74,914.10
K 54	Agricul. Engineering	12,990.27	291.13	17,265.80	30,547.20
K 55	Agronomy	34,869.05	999.45	22,622.22	58,490.72
K 56	Dairy & Animal Science	20,931.50	294.27	37,997.58	59,223.35
K 57	Bacteriology	11,160.06	426.12	10,701.39	22,287.57
K 58	Botany	20,938.96	212.32	5,999.76	27,151.04
K 59	Chemistry	15,051.35	781.41	5,999.76	21,832.52
K 60	Cranberry Station	46,861.09	2,934.45	14,399.32	64,194.86
K 62	Entomology	10,316.30	385.50	8,525.54	19,227.34
K 63	Farm Service	82,476.14	14,538.00	18.00	97,032.14
K 64	Floriculture	9,411.02	268.96	5,466.26	15,146.24
K 65	Food Technology	18,424.38	305.53	35,190.88	53,920.79
K 66	Forestry	6,527.37	14.85	5,651.31	12,193.53
K 67	Home Economics	16,185.35	61.77	16,476.79	32,723.91
K 68	Landscape Architecture	859.38	141.08		1,000.46
K 69	Olericulture	5,177.08	317.85	7,685.64	13,180.57
K 70	Pomology	13,636.00	868.64	5,999.76	20,504.40
K 71	Poultry	18,586.28	6,844.88	15,464.70	40,895.86
K 72	Veterinary Science	13,264.76		16,535.16	29,799.92
K 73	Waltham Field Station	131,887.09	5,442.91	27,076.45	164,406.45
K 74	Shade Tree Research	9,547.12		3,472.92	13,020.04
	Sub-Totals	571,098.15	40,915.93	305,262.58	917,276.66
	(Control Service)				
K 81	Agricul. Communications		1,344.28		1,344.28
K 82	Dairy Cattle	19,530.83	1,152.73		20,683.56
K 83	Farm Service				
K 84	Dairy, Feed, Fertilizer and Seed Laws	82,118.97	9,137.28		91,256.25
K 85	Shade Tree	41,892.93	3,608.64		45,501.57
K 86	Veterinary Science	172,352.05	23,081.69	212.28	195,646.02
	Sub-Totals	315,894.78	38,324.62	212.28	354,431.68
	Totals	1,869,041.67	192,550.75	607,906.94	2,669,499.36
L 11	School of Business Administration	89,890.92	2,583.40	6,085.67	98,559.99
M	School of Engineering:				
M 11	Dean of Engineering	20,460.00	2,678.22	1,008.00	24,146.22
M 12	Chemical Engineering	25,203.95	3,367.07		28,571.02
M 13	Civil Engineering	68,952.65	5,681.91		74,634.56
M 14	Mechanical Engineering	99,806.64	6,371.79	18,049.10	124,227.53
M 15	Electrical Engineering	70,505.17	4,416.80		74,921.97
	Totals	284,928.41	22,515.79	19,057.10	326,501.30

Schedule G (Continued)

Fiscal Year Expenditure Summary
By Budget Divisions and Departments

	State Funds Salaries and Wages	State Funds Other Expenditures	Other Funds Salaries and Wages*	Net Total
School of Home Economics	$ 71,649.65	$ 5,057.58	$ 12,947.37	$ 89,654.60
School of Nursing	32,923.42	3,848.10	4,099.65	40,871.17
Division of Physical Education:				
Director's Office	98,783.65	6,185.61	6,216.98	111,186.24
Phys. Ed. for Men	46,555.97	7,496.19	488.88	54,541.04
Phys. Ed. for Women	38,506.45	2,417.20	20.00	40,943.65
Athletics	7,946.45	569.25		8,515.70
Recreation	4,023.00	- 20.68		4,002.32
Totals	195,815.52	16,647.57	6,725.86	219,188.95
School of Education	45,083.00	3,939.25	2,344.12	51,366.37
Division of Military Science:				
Air R.O.T.C.	3,768.46	315.25		4,083.71
Armored R.O.T.C.	12,396.00	126.72		12,522.72
Totals	16,164.46	441.97		16,606.43
Graduate School	65,534.85	935.01		66,469.86
Bureau of Gov't Research	22,092.38	2,348.78		24,441.16
Summer School	42,088.19	314.49	667.70	43,070.38
Operation of Plant:				
Expense	620,299.66	876,374.61	360.07	1,497,034.34
Cm&P HP&E Supplies		37,843.37		37,843.37
Janitor M. & S.		13,361.14		13,361.14
Totals	620,299.66	927,579.12	360.07	1,548,238.85
Boarding Halls:				
Expense	249,226.73	14,700.52		263,927.25
Materials & Supplies		324,308.34		324,308.34
Totals	249,226.73	339,008.86		588,235.59
Student Union:				
Student Union General Fund			26,074.72	26,074.72
Student Union Food Fund			29,858.32	29,858.32
Student Union Store Fund			47,030.91	47,030.91
Totals			102,963.95	102,963.95
Other Miscellaneous			2,359.89	2,359.89
Reserve Accounts	4,845.01	69,328.17		74,173.18
TOTAL EXPENDITURES	$5,281,143.26	1,733,344.99	911,083.33	7,925,571.58

penditures, other than for salaries and wages, not distributed by budget divisions and

Schedule G (Continued)

Fiscal Year Expenditure Summary
By Budget Divisions and Departments

Dept. Code		State Funds Salaries and Wages	State Funds Other Expenditures	Other Funds Salaries and Wages*	Net Total
K	College of Agriculture: (Experiment Station)				
K 51	Director's Office	$ 24,243.99	$ 314.61	$ 2,615.23	$ 27,173
K 52	Agricul. Communications	12,961.90	5,447.92		18,409
K 53	Agricul. Economics	34,791.71	24.28	40,098.11	74,914
K 54	Agricul. Engineering	12,990.27	291.13	17,265.80	30,547
K 55	Agronomy	34,869.05	999.45	22,622.22	58,490
K 56	Dairy & Animal Science	20,931.50	294.27	37,997.58	59,223
K 57	Bacteriology	11,160.06	426.12	10,701.39	22,287
K 58	Botany	20,938.96	212.32	5,999.76	27,151
K 59	Chemistry	15,051.35	781.41	5,999.76	21,832
K 60	Cranberry Station	46,861.09	2,934.45	14,399.32	64,194
K 62	Entomology	10,316.30	385.50	8,525.54	19,227
K 63	Farm Service	82,476.14	14,538.00	18.00	97,032
K 64	Floriculture	9,411.02	268.96	5,466.26	15,146
K 65	Food Technology	18,424.38	305.53	35,190.88	53,920
K 66	Forestry	6,527.37	14.85	5,651.31	12,193
K 67	Home Economics	16,185.35	61.77	16,476.79	32,723
K 68	Landscape Architecture	859.38	141.08		1,000
K 69	Olericulture	5,177.08	317.85	7,685.64	13,180
K 70	Pomology	13,636.00	868.64	5,999.76	20,504
K 71	Poultry	18,586.28	6,844.88	15,464.70	40,895
K 72	Veterinary Science	13,264.76		16,535.16	29,799
K 73	Waltham Field Station	131,887.09	5,442.91	27,076.45	164,406
K 74	Shade Tree Research	9,547.12		3,472.92	13,020
	Sub-Totals	571,098.15	40,915.93	305,262.58	917,276
	(Control Service)				
K 81	Agricul. Communications		1,344.28		1,344.
K 82	Dairy Cattle	19,530.83	1,152.73		20,683.
K 83	Farm Service				
K 84	Dairy, Feed, Fertilizer and Seed Laws	82,118.97	9,137.28		91,256.
K 85	Shade Tree	41,892.93	3,608.64		45,501.
K 86	Veterinary Science	172,352.05	23,081.69	212.28	195,646.
	Sub-Totals	315,894.78	38,324.62	212.28	354,431.
	Totals	1,869,041.67	192,550.75	607,906.94	2,669,499.
L 11	School of Business Administration	89,890.92	2,583.40	6,085.67	98,559.
M	School of Engineering:				
M 11	Dean of Engineering	20,460.00	2,678.22	1,008.00	24,146.
M 12	Chemical Engineering	25,203.95	3,367.07		28,571.
M 13	Civil Engineering	68,952.65	5,681.91		74,634.
M 14	Mechanical Engineering	99,806.64	6,371.79	18,049.10	124,227.
M 15	Electrical Engineering	70,505.17	4,416.80		74,921.
	Totals	284,928.41	22,515.79	19,057.10	326,501.

Schedule G (Continued)

Fiscal Year Expenditure Summary
By Budget Divisions and Departments

Dept. Code		State Funds Salaries and Wages	State Funds Other Expenditures	Other Funds Salaries and Wages*	Net Total
N 11	School of Home Economics	$ 71,649.65	$ 5,057.58	$ 12,947.37	$ 89,654.60
0 11	School of Nursing	32,923.42	3,848.10	4,099.65	40,871.17
P	Division of Physical Education:				
P 11	Director's Office	98,783.65	6,185.61	6,216.98	111,186.24
P 12	Phys. Ed. for Men	46,555.97	7,496.19	488.88	54,541.04
P 13	Phys. Ed. for Women	38,506.45	2,417.20	20.00	40,943.65
P 14	Athletics	7,946.45	569.25		8,515.70
P 15	Recreation	4,023.00	- 20.68		4,002.32
	Totals	195,815.52	16,647.57	6,725.86	219,188.95
Q 11	School of Education	45,083.00	3,939.25	2,344.12	51,366.37
R	Division of Military Science:				
R 11	Air R.O.T.C.	3,768.46	315.25		4,083.71
R 12	Armored R.O.T.C.	12,396.00	126.72		12,522.72
	Totals	16,164.46	441.97		16,606.43
S 11	Graduate School	65,534.85	935.01		66,469.86
T 11	Bureau of Gov't Research	22,092.38	2,348.78		24,441.16
U 11	Summer School	42,088.19	314.49	667.70	43,070.38
X	Operation of Plant:				
X 11	Expense	620,299.66	876,374.61	360.07	1,497,034.34
X 12	Cm&P HP&E Supplies		37,843.37		37,843.37
X 14	Janitor M. & S.		13,361.14		13,361.14
	Totals	620,299.66	927,579.12	360.07	1,548,238.85
Y	Boarding Halls:				
Y 11	Expense	249,226.73	14,700.52		263,927.25
Y 12	Materials & Supplies		324,308.34		324,308.34
	Totals	249,226.73	339,008.86		588,235.59
Z	Student Union:				
Z 11	Student Union General Fund			26,074.72	26,074.72
Z 12	Student Union Food Fund			29,858.32	29,858.32
Z 13	Student Union Store Fund			47,030.91	47,030.91
	Totals			102,963.95	102,963.95
400	Other Miscellaneous			2,359.89	2,359.89
900	Reserve Accounts	4,845.01	69,328.17		74,173.18
	TOTAL EXPENDITURES	$5,281,143.26	1,733,344.99	911,083.33	7,925,571.58

*Expenditures, other than for salaries and wages, not distributed by budget divisions and departments.

Schedule H

Boarding Halls

Statement of Receipts and Expenditures

Receipts:			
Sales - Student Board		$592,911.27	
Sales - Snack Bar		37,448.45	
Sales - Miscellaneous		119.55	
Sales - Cafeteria		25,210.03	
Sales - Employees' Meal Tickets		520.20	
Total Sales			$656,209.50
Cost of Sales:			
Inventory, June 30, 1956	$ 27,723.23		
Purchases	314,682.90		
	342,406.13		
Less: Inventory, June 30, 1957	16,029.30		
Cost of Food Sold			326,376.83
Gross Profit on Sales			$329,832.67
Expenditures:			
Salaries and Wages		249,226.73	
Supplies and Materials:			
Inventory, June 30, 1956	3,520.62		
Purchases	8,252.74		
	11,773.36		
Less: Inventory, June 30, 1957	3,605.40		
		8,167.96	
Other Expenditures		16,073.22	
Total Expenditures			273,467.91
Excess of Receipts over Expenditures			$56,364.76

Schedule I

Intercollegiate Athletics

Summary of Receipts and Disbursements

Balance, July 1, 1956		$32,665.34	
Receipts:	$132,955.58		
Less: Refund of Fees	851.30		
		132,104.28	
			164,769.62
Disbursements:			118,197.60
Balance, June 30, 1957			$46,572.02

Athletic Reserve Account

Balance, July 1, 1956	$ 934.94
Interest on Savings Bank Account	29.09
Balance, June 30, 1957	$ 964.03

Schedule J

Recognized Student Organizations

Financial Statement
Fiscal Year ending June 30, 1957

Balance on Hand with University Treasurer, July 1, 1956		$20,690.95
Balance on Deposit at Amherst Savings Bank		33,084.14
Student Fees Deposited		86,741.68
Cash Receipts		73,891.25
	Total	$214,408.02
Balance on Hand with University Treasurer, June 30, 1957		11,852.26
Balance on Deposit at Amherst Savings Bank		44,865.63
Student Fees Refunded		837.74
Cash Expenditures		156,852.39
	Total	$214,408.02

Above Statement prepared by Student Union.

Schedule K-1

Student Union - University Store Fund

Statement of Income and Expense
July 1, 1956 to June 30, 1957

	Books	Supplies	Food Service*	Total
Sales	$167,383.29	$107,989.92	$26,266.79	$301,640.00
Cost of Goods Sold:				
Inventory 7/1/56	22,792.59	38,538.74	1,722.71	63,054.04
Net Purchases	146,697.16	84,814.47	11,969.42	243,481.05
	169,489.75	123,353.21	13,692.13	306,535.09
Less Inventory June 30, 1957	24,310.11	41,333.15	---	65,643.26
Cost of Goods Sold	145,179.64	82,020.06	13,692.13	240,891.83
Gross Profit on Sales	22,203.65	25,969.86	12,574.66	60,748.17
Other Income:				
Miscellaneous				84.69
Insurance Refunds				486.63
Vending Machines				63.43
Advertising Products				43.00
Used-Book Salesmen				58.92
Post Office				1,116.63
Gross Profit from Operations				62,601.47

*Discontinued January 31, 1957

Schedule K-1 (Continued)

Student Union - University Store Fund

Statement of Income and Expense
July 1, 1956 to June 30, 1957

			Total
Expenses:			
Transportation In - General		$ 214.48	
Transportation Out		208.99	
Miscellaneous Expense		81.01	
Repair Service		40.00	
Selling Expenses:			
Permanent Payroll	16,248.54		
Student Payroll	5,464.06		
Supplies	560.42		
Insurance	331.60		
Rent, Heat, Light	240.00		
Depreciation	935.20		
Repairs & Maintenance	202.08		
Telephone & Telegraph	105.27		
Postage	121.98		
Advertising	850.45		
Laundry	433.14		
Misc. Selling Expense	48.00	25,540.74	
Administrative Expenses:			
Permanent Payroll	17,924.66		
Student Payroll	96.00		
Supplies	124.77		
Insurance	53.14		
Rent, Heat and Light	60.00		
Depreciation	152.48		
Repairs & Maintenance	887.17		
Telephone & Telegraph	81.60		
Postage	155.42		
Losses Bad Debts	108.00		
Stationery & Printing	1,071.70		
Services Purchased	102.00		
Travel	283.14		
Misc. Admin. Expense	176.55	21,276.63	
Warehouse and Storage Expenses:			
Permanent Payroll	4,548.44		
Depreciation	20.73		
Repairs & Maintenance	28.10	4,597.27	
Total Expenses			51,959.12
Excess of income over expenses			$10,642.35

Above Statement prepared by Student Union.

Schedule K-2

Student Union - University Store Fund

Balance Sheet as of June 30, 1957

ASSETS			LIABILITIES AND CAPITAL	
Cash		$16,042.61	Accrued Wages	$ 169.00
Accounts Receivable		8,606.23	Deposit on Books	4.75
Inventory		65,643.26	Sales Tax Payable	78.92
Store Equipment	7,043.66		Contingencies Reserve	500.00
Less Depreciation	935.20	6,108.46		
			Retained Income	98,261.92
Office Equipment	2,521.24			
Less Depreciation	152.48	2,368.76		
Shop & Storage Equip.	266.00			
Less Depreciation	20.73	245.27		
		$99,014.59		$99,014.59
Net Worth July 1, 1956				127,619.57
Less:				
Transfer to Student Union General Fund			$20,000.00	
Transfer to Student Union Food Service			20,000.00	40,000.00
				87,619.57
Excess of Income over Expenses for the year				10,642.35
Retained Income as of June 30, 1957				$98,261.92

Above Statement prepared by Student Union.

Schedule K-3

Student Union - Food Service Fund

Statement of Income and Expenses
Period Ending June 30, 1957*

Counter Sales	$93,799.76	
Catering Sales	8,230.81	
Total Sales	102,030.57	
Miscellaneous Operating Income	166.31	
Total Income		$102,196.88
COST OF GOODS SOLD		
Inventory 2/1/57	---	
Food Purchases	48,272.58	
	48,272.58	
Inventory 6/30/57	3,155.62	
Cost of Goods Sold		45,116.96
Gross Profit on Sales		$57,079.92
EXPENSE		
Salaries - Permanent Payroll	26,710.57	
Salaries - Student Payroll	5,400.30	
Supplies	7,362.70	
Repairs and Maintenance	2,127.38	
Advertising	15.25	
Laundry	1,674.59	
Miscellaneous Expense	47.31	
China & Silver	4,025.83	
Travel and Conventions	57.96	
Transportation In	9.81	
Total Expenses		47,431.70
Excess of income over expenses		$9,648.22

*Opened for operations on February 1, 1957

Above Statement prepared by Student Union.

Schedule K-4

Student Union - Food Service Fund

Balance Sheet

ASSETS		LIABILITIES AND CAPITAL	
Cash Fund	$23,561.94	Accounts Payable	$ 3,857.95
Accounts Receivable	909.16	Accrued Wages	449.12
Inventory	3,155.62	Mass. Old Age Tax Payable	87.94
Equipment	6,416.51	Capital Account	29,648.22
	$34,043.23		$34,043.23

Capital Account

Transfer from University Store	$20,000.00
Excess of Income over Expenses for period ending June 30, 1957	9,648.22
Net Worth as of June 30, 1957	$29,648.22

Above Statement prepared by Student Union.

Schedule K-5

Student Union General Fund

Statement of Receipts and Disbursements

For the Period ended June 30, 1957*

Receipts			
Student Fees, less $1,001.27 Refunds		$88,556.12	
Transfer from University Store Fund		20,000.00	
Lobby Counter		10,881.65	
Games Area		14,294.29	
Convention Services		5,469.90	
Rents and Custodial Fees		1,982.50	
Other Activities		6,291.67	
Total Receipts			$147,476.13
Disbursements			
Salaries and Wages			
Administrative	$18,628.32		
Maintenance	10,664.76	29,293.08	
Building Rental		80,000.00	
Merchandise Purchases		10,051.36	
Other Rentals & Installations		3,120.00	
Supplies		4,117.73	
Miscellaneous		6,245.02	
Total Disbursements			132,827.19
Balance as of June 30, 1957			$14,648.94**

*Student Union opened for activities on February 1, 1957
**Accounts Payable outstanding June 30, 1957, total $3,436.21

Above Statement prepared by Student Union.

Schedule L

Inventory of Land

	Acreage	Year Acquired	Book Value July 1, 1956	Book Value June 30, 1957
College Farm - Amherst & Hadley	379.794	1864	$ 36,386.00	$ 36,386.00
Pelham Quarry, Pelham	.50	1866	500.00	500.00
Bangs Place	.25	1892	2,350.00	2,350.00
Clark Place	17.	1896	4,500.00	4,500.00
Westcott Land	2.318	1909	2,250.00	2,250.00
Baker Place	5,003	1909	2,500.00	2,500.00
Kellogg Place	17.035	1909	1,868.45	1,868.45
Allen Place	.25	1910	500.00	500.00
Chambury Place	.25	1910	450.00	450.00
Harlow Farm & Orchard	28.49	1910	1,584.63	1,584.63
Hawley and Brown	46.02	1910	675.00	675.00
Loomis' Place	.25	1910	415.00	415.00
Louisa Baker Place	5.184	1910	3,000.00	3,000.00
Old Creamery Place	.50	1910	1,000.00	1,000.00
Newell Farm, Hadley	62.	1911	2,800.00	2,800.00
Cranberry Land, East Wareham	27.52	1910 - 1928	11,863.00	11,863.00
Owen Farm	27.	1915	5,000.00	5,000.00
Mt. Toby Forest, Sunderland and Leverett	755.27	1916	30,000.00	30,000.00
Dickinson Land	6.	1916	7,850.00	7,850.00
Brown Land	.50	1916	500.00	500.00
George Cutler, Trustee	1.56	1917	2,700.00	2,700.00
Angus Land	8.	1917	800.00	800.00
Tillson Farm	75.	1917	2,950.00	2,950.00
Brooks Farm	59.40	1922	11,000.00	11,000.00
Waltham Field Station, Waltham	58.09	1924 - 1945	24,470.00	24,470.00
Q. T. V. Land	4.00	1928	12,000.00	12,000.00
Tuxbury Land	30.	1936	7,000.00	7,000.00
Powers Land	.25	1949	5,000.00	5,000.00
Cadwell Property, Pelham and Belchertown	1,200.	1951	8,001.00	8,001.00
Gamma Alpha Sigma Phi Land	.93	1954	5,000.00	5,000.00
Montague Property	27.7	1955	4,000.00	4,000.00
Total - Land	2,846.064		$198,913.08	$198,913.08

Schedule L-1

Inventory of Buildings

Buildings	Year Constructed or Acquired	Book Value July 1, 1956	Additions	Deductions	Book Value June 30, 1957
Cashier's House	1867	$ 1,200.00	$	$	$ 1,200.00
Waugh House	1867	3,000.00		3,000	---
Stockbridge House	1867-1933	9,100.00			9,100.00
Physics Laboratory	1867	5,180.00			5,180.00
Home Practice House for Girls	1867-1928-1951	14,800.00			14,800.00
North Dormitory	1868-1930	66,000.00		66,000	---
Farm House	1869	4,000.00			4,000.00
Drill Hall & Gun Shed	1883-95-1909-27-35	28,344.00			28,344.00
President's House	1883-84-1910	19,000.00			19,000.00
South Dormitory	1885-86-1938-39-40	100,300.00			100,300.00
Chapel	1885-1936	76,288.32			76,288.32
Regulatory Service	1886-87-96-1911	27,000.00			27,000.00
Hospital Ward	1886-93-1934-45	19,300.00			19,300.00
Vegetable Plant House	1886-92-93	4,700.00			4,700.00
Experiment Station Service	1882-87-91-95-96	5,000.00			5,000.00
Experiment Station Office	1889-1908	14,000.00			14,000.00
Nutrition Laboratory Annex	1891	2,000.00			2,000.00
Nutrition Laboratory	1891-1934-35-37-38	19,374.38			19,374.38
Physics Annex	1893-1923-1941	6,497.00			6,497.00
Farm Horse Barn #1	1894	5,000.00			5,000.00
Mathematics Building	1895-1905	6,000.00			6,000.00
Munson Hall	1898-99-1956	70,127.26			70,127.26
Draper Hall	1903-12-44-1955	296,529.94			296,529.94
Wilder Hall	1905-1906-57	37,000.00	8,662		45,662.00
Clark Hall & Greenhouse	1907	67,400.00			67,400.00
Power Plant & Storage Building	1907-11-15-16-17-40-48-57	79,830.00	42,972		122,802.00
Edward A. White Greenhouse	1908-9-1939	25,500.00			25,500.00
French Hall	1909-1913-1956	74,356.59			74,356.59
Farm Young Stock Barn	1909-1939-1956	36,837.00			36,837.00
Jewett House and Barn	1909	1,200.00			1,200.00
Farm Dairy Barn & Storage	1910-41-42-1955-1956	31,211.98			31,211.98
Farm Machinery Barn	1910	4,000.00			4,000.00
Fernald Hall	1910	80,000.00			80,000.00
Harlow House & Barns	1910-1932	2,550.00			2,550.00
Entomological Glasshouse	1911	825.00			825.00
Waiting Station	1911	500.00			500.00
Poultry Laying House #5	1911-1942	2,963.70			2,963.70

Inventory of Buildings

Buildings	Year Constructed or Acquired	Book Value July 1, 1956	Additions	Deductions	Book Value June 30, 1957
Poultry Brooder #3	1911-1926	$ 3,100.00	$	$	$ 3,100.00
Poultry Demonstration #1	1911	1,400.00			1,400.00
Grinnell Arena	1911	24,000.00			24,000.00
Fisher Laboratory	1911-30-43-44	24,616.85			24,616.85
Farm Sheep Barn	1911-1955	6,099.00			6,099.00
Farm Shop	1911	200.00			200.00
Poultry #4 Mechanics Storage	1912-1915	2,700.00			2,700.00
Flint Laboratory	1912-1937-57	79,000.00	131,723.58		210,723.58
Apiary	1912	3,000.00			3,000.00
Poultry #8 Breeding House	1914	1,250.00			1,250.00
Stockbridge Hall	1914-1956	417,066.82			417,066.82
Farm Piggery	1914	3,000.00			3,000.00
Farm Bungalow	1914	2,100.00			2,100.00
Agronomy Greenhouse	1914-1924	4,800.00			4,800.00
Agricultural Engineering Building	1915-1916-1924	28,550.00			28,550.00
Poultry #10 Duck House	1915	100.00			100.00
Poultry #7 Small Henhouse	1915	50.00			50.00
Marshall Hall	1915-1945	68,459.00			68,459.00
Hospital (2 Units)	1915	15,000.00			15,000.00
Poultry Unit #11 for 100 Hens	1916	504.00			504.00
Poultry Unit #12 for 200 Hens	1917	400.00			400.00
Angus Cottage	1917	148.00			148.00
Poultry #6 Manure Shed	1918	98.00			98.00
Poultry #2 Oil House	1918	73.50			73.50
Mount Toby House & Barn	1918	4,000.00			4,000.00
Military Storage	1918	250.00			250.00
Grounds Tool Shed	1918	245.00			245.00
Turbine House	1918	17,665.00			17,665.00
Adams Hall	1919-1941	128,175.00			128,175.00
Horticultural Mfg. Shed	1920	3,185.00			3,185.00
Memorial Hall	1920-1941	107,425.00			107,425.00
Poultry Hot Water Brooder #13	1921-1929	2,450.00			2,450.00
Farm Bull Pens & Fence	1922-1956	14,041.50			14,041.50
Brooks House, Barn & Sheds	1922-1929	9,400.00			9,400.00
Goessmann Laboratory	1922-1946	301,612.00			301,612.00
Tillson Poultry Houses (4)	1923	2,000.00			2,000.00
Tillson Summer Sheds (3)	1923	277.00			277.00
Farm Bungalow #2	1923	4,000.00			4,000.00
Tillson Foreman's Quarters	1923-1926	6,714.00			6,714.00

Schedule L-1 (Continued)

Inventory of Buildings

Buildings	Year Constructed or Acquired	Book Value July 1, 1956	Additions	Deductions	Book Value June 30, 1957
Tillson Hen Brooder #6	1923	$ 1,009.00	$	$	$ 1,009.00
Farm Bungalow #3	1923	4,000.00			4,000.00
Horticultural Garage	1923	1,574.00			1,574.00
Brooks Tobacco Barn	1924	3,000.00			3,000.00
Waltham Sta. Small Stock Barn	1924	2,000.00			2,000.00
Waltham Small Shed	1924	800.00			800.00
Waltham Office & Lab. Bldg.	1924-1935	11,363.40			11,363.40
Waltham Ice House	1924	100.00			100.00
Waltham Farmhouse	1924	6,000.00			6,000.00
Waltham Field Sta. Greenhouse	1924-1929	29,000.00			29,000.00
Stable for Cavalry Unit	1925	16,500.00			16,500.00
Cranberry Laboratory	1926	6,300.00			6,300.00
Cranberry Garage	1926	1,200.00			1,200.00
Cranberry Shed (Storage)	1926	300.00			300.00
Cranberry Oil House	1926	40.00			40.00
Cranberry Pump House	1926	165.00			165.00
Farm Corncribs (7)	1927	650.00			650.00
Farm Bungalow Garage	1927	350.00			350.00
Agricultural Farmhouse	1928	7,500.00			7,500.00
Farm Horse Barn #2	1928	5,294.00			5,294.00
Horticultural Mfg. Bldg.	1929	69,966.92			69,966.92
Garage (6 car)	1929	2,500.00			2,500.00
Brooks Farm Garage	1929-30	300.00			300.00
Waltham Field Station Garage	1930	1,000.00			1,000.00
Waltham Hay Barn	1930	3,500.00			3,500.00
Physical Education Building	1930	287,500.00			287,500.00
Lumber Shed	1931-1940	4,300.00			4,300.00
Tillson Grain House #1	1933	100.00			100.00
Pomology Tool Shed	1933	1,254.00			1,254.00
Manure Pit	1933	500.00			500.00
Horticultural Hayshed	1933	400.00			400.00
Farley 4-H Club House	1933	3,500.00			3,500.00
Thatcher Hall	1934-35	193,950.00			193,950.00
Goodell Library	1934-35	238,500.00			238,500.00

Inventory of Buildings

Buildings	Year Constructed or Acquired	Book Value July 1, 1956	Additions	Deductions	Book Value June 30, 1957
Bowditch Lodge	1937	$ 5,400.00	$	$	$ 5,400.00
Waltham Field Station Propagation House	1937	8,497.37			8,497.37
Tillson 2-car Garage	1939	384.00			384.00
Tillson Breeding House	1939	5,300.00			5,300.00
Tillson Storage Building	1939	3,000.00			3,000.00
Federal Buildings, Liberal Arts Annex, Marshall Hall Annex & Draper Hall Annex	1947	25,000.00			25,000.00
Poultry Laying House	1947	10,000.00			25,000.00
Tillson Brooder House #13	1947	10,000.00			10,000.00
Berkshire, Hampshire & Plymouth Houses	1948	495,800.00			495,800.00
Middlesex & Suffolk Houses	1948	327,600.00			327,600.00
Skinner Hall	1948	596,700.00			596,700.00
Dutch Elm Disease Laboratory	1949	23,400.00			23,400.00
Engineering Building Annex	1949	118,500.00			118,500.00
Engineering Building - Gunness Laboratory	1949	374,500.00			374,500.00
Waltham Field Station Building	1950	278,400.00			278,400.00
R. O. T. C. Facilities, 2 Bldgs.	1950-51	63,800.00			63,800.00
Hasbrouck Lab., Physics Bldg.	1950	501,000.00			501,000.00
Paige Laboratory, Animal Disease Control	1950-51	487,500.00			487,500.00
New Power Plant Building	1951-1955	1,361,000.00			1,361,000.00
Engineering Building - Wing	1950-1951-56	1,120,753.61			1,120,753.61
Electric Generating Plant	1952	263,615.36			263,615.36
Animal Isolation Building	1953	98,500.00			98,500.00
University Commons	1953-54-55	985,300.00			985,300.00
Durfee Conservatory	1955	69,684.00			69,684.00
Montague Buildings	1955	8,000.00			8,000.00
Machmer Hall	1957		967,578.77		967,578.77
Total - Buildings		$10,680,120.50	$1,150,936.35	$69,000.00	$11,762,056.85

Schedule L-2

Inventory of Improvements other than Buildings

	Book Value July 1, 1956	Additions	Book Value June 30, 1957
Roads, Sidewalks, etc.	173,099.46		$ 173,099.46
Water Mains	92,143.11		92,143.11
Sewerage & Drainage	55,237.50		55,237.50
Steam Lines	913,035.75	162,831.86	1,075,867.61
Electrical Lines	396,108.20	109,694.00	505,802.20
Parking Areas	10,727.00		10,727.00
Tennis Courts	62,042.25		62,042.25
Totals	$1,702,393.27	$272,525.86	$1,974,919.13

UNIVERSITY OF MASSACHUSETTS

College of Arts and Sciences

Memorandum

To: The President 2 December 1957

From: Dean of Arts and Sciences

Subject: Annual Report, Arts and Sciences

1. I have the honor to forward herewith the annual reports of the several departments in this College. In them is to be found a wealth of information and the detailed accounting of our stewardship over the past year.

2. In the main, the past year has seen substantial, if unspectacular progress, toward three major goals. These are the easing of the teaching load, the encouragement of scholarly work, and the upgrading of the faculty.

a. The teaching load

In general, the enrollment of students has displayed no startling or puzzling shifts and I should like to repeat the prediction made two years ago that the College would continue to expand although perhaps less rapidly than certain of the other units of undergraduate instruction. The size of the College is, of course, important although it should be remembered that the work of the College depends as much on total university enrollment, both graduate and undergraduate, in a very direct manner.

We are attempting to cope with the problem of teaching these students by two methods:

1) There has been a steady growth in the teaching staff. For the most part these have gone to the departments responsible for instruction in the basic subjects. It should be emphasized, however, that despite recent additions teaching ratios over most of the College compare very unfavorably with teaching ratios elsewhere in the University and more effort along this line is indicated. The College is responsible for upwards of 70% of the instruction of the University. Although I do not argue that the College should therefore have 70% of the teaching staff, it should obviously be more than the 51% we now have. / In this calculation I have used only teaching staff. If one considers the total "faculty", the percentage is 31%./

2) There has been a modest amount of experimentation with teaching methods. This has not gone as far as I would like and there have been indications that it is not altogether palatable with either faculty or students. By way of encouragement I have taken the attitude that the matter is the responsibility of the departmental chairman and that he may use the time saved in any way he wishes.

It should be recognized that the use of larger classes, and the like, does nothing to alleviate the teacher-student ratio. It is also true that our efforts here are limited by the number of graduate students who can be used as teaching assistants. About the most we can expect from our current efforts, therefore, is to prove that it is possible. In the local context, this will be no mean achievement. You have already received my views on the inevitability of the small class and its deliterious consequences.

b. The encouragement of scholarly work:

When I came to this campus five years ago the ethos seemed to be a species of intellectual isolationism the principal manifestation of which was an inordinate insistence on teaching. Without derogating from the importance of good instruction, I should like to point out that of the many factors in the educational problem, here is one that defies both analysis and, more important, objective comparison.

I take hope in the fact that we appear to be emerging into the world. Although our list of publications is still not very impressive the individual who seeks to find such an outlet is becoming less egregious and attendance at scholarly gatherings is becoming more frequent.

Certain material factors enter into this development:

a) A favorable attitude toward contract research.
b) A more generous use of teachers research funds.
c) The rearrangement of teaching schedules to provide time for research; this is a bootstrap operation but it is beginning to pay dividends.

It is to be hoped that the newly established Arts and Sciences Scholarship will make it plain that we mean what we say in this connection and will produce some scholarly effort in which the University can take pride. I sometimes wonder whether the ethos of an institution can really be changed. I am encouraged, however, by the thought that it is not so much a matter of change as a problem of releasing latent capacities that were already here. There is a difference between attempting to push a faculty into something and not trying to prevent it.

c. The upgrading of the faculty

Action along these lines has taken two forms. The first is a series of appointments at the upper levels. Under the powers given us in the Freedom Bill, we have strengthened our work in English (Copeland), Music (King), Botany (Schuster), Geology (Farquhar), Psychology (Teichner), Mathematics (Dickinson and Azpeitia), and Physics (Trimmer, Rosen, and DeFilippes). Plans are now going forward to do the same in Government and to add some more strength to Physics.

Together with this an attempt is being made to eliminate from the faculty those individuals who appear not to understand the requirements of residence in a community of scholars. This is a considerably less pleasant process and we are late in beginning it. Nevertheless, I see no alternative to considering each tenure appointment and each promotion as being in open competition with all the world. We must move quickly while there is yet time.

3. Although I have a certain amount of confidence in the course that has been set, the problems that remain are both considerable in number and formidable in character. Without discussing those, such as faculty salaries and the condition of the library, which are of an all-University character, I would like to indicate those that press especially on the College.

a) We have not yet finished the revision of the Curriculum. I feel that progress is being made here but the problems are numerous and the opposition stubborn. We may have a test here as to whether we have a College or a series of satrapies.

b) Space is getting increasingly difficult as our activities increase. This is especially true in the scientific areas where we are acquiring persons who want to do research. We are approaching a crisis in some areas.

c) I am not yet satisfied that we have worked out an adequate program for the better students. Our system of placement examinations begun this year was but a faltering step in the right direction. More needs to be done and whatever is done needs to be better planned.

d) Our program needs further enrichment especially in the various fields of Art. Fewer Precisionettes and more string quartets might serve as a slogan for Music. Real work in the fine arts remains a hope for the future.

e) The College needs a more elaborate internal organization. Too much depends on the good instincts of the Dean. I am still casting about for something which is both democratic enough to suit me and not likely to arouse a nest of intramural fears and jealousies. As yet nothing satisfactory has emerged.

In this connection, however, I should like to recommend one immediate step as we move toward what we are pleased to call the Twelve Month Year (although what other types there may be do not occur to me). If we are to undertake an effort of this type, it seems obvious that we shall need continuous planning and supervision. I therefore urge that all department heads be put immediately in the "A" category. In fact, this is a necessity even without the program of continuous operation; with it, some such arrangement becomes an imperative.

4. In summary, then, I should like to say that we are getting better but that we need to move faster and further. The returns on our investment are improving and I see no cause to despair in the direction in which we have chosen to go.

Respectfully,

Fred V. Cahill, Jr.

Fred V. Cahill, Jr.

REPORT OF THE DEAN OF THE COLLEGE OF AGRICULTURE
University of Massachusetts
Amherst, Massachusetts
For the year ending December 31, 1957

The maintenance of the status quo is a characteristic of organized groups that seems to be overexaggerated in the case of universities and colleges. Adjusting to changes is one of our greatest problems. Since changes brought about in agriculture during the past century have resulted in remarkable shifts in our population from farms to urban areas, it should be obvious to the most ardent worshiper of the past that it would not be satisfactory to operate a college of agriculture on the same basis that prevailed in 1867. The changes in agriculture since 1940 have been even more dramatic than in the 80 years before that, and thus it follows that what was satisfactory in 1940 for a college of agriculture is almost as out-of-date as what was right in 1867.

Changes within the College of Agriculture, and changes relative to the other parts of the University have been taking place at a fairly rapid pace. More changes will need to be made if the College of Agriculture is to serve the people of the Commonwealth in a manner to which they are entitled, at a cost they can afford, and in keeping with the objectives of a state university created for public service.

The old, and still popular, concept is that agriculture embraces only those activities connected with the production of raw agricultural products, and this leads to a corollary thought that the opportunities for graduates from colleges of agriculture are limited to the field of agricultural production.

Food and fiber which originate on the farms in the United States require approximately 40% of the total population for their production, processing and distribution, and have an annual value of over $100 billion dollars to the consumer. The traditional thinking that agriculture is limited to production has resulted in a decrease in enrollment in all agricultural colleges in the country. There has been an 8% decrease in enrollment in the four-year course at the University of Massachusetts from 1956 to 1957; however, the enrollment of the Stockbridge School has maintained approximately the same level during the past two years. Enrollments are increasing in some areas such as arboriculture, food management, landscape operations, turf maintenance, forestry, food technology and landscape architecture, while the enrollments in the traditional production departments are decreasing. The principal objective of the College of Agriculture is to develop more effective methods for production, processing and distribution of food.

Research, extension and control programs are being changed as rapidly as possible to meet the same kind of change in demand from the public for education and service as is shown in the shifts in the instruction programs. New extension programs in food distribution, family economics and 4-H have been initiated. Educational programs to aid producers, processors, distributors and merchandisers of food have been established, using personnel from several different departments to increase the effectiveness of the program. The programs for youth and the housewife have been modernized to include activities which are particularly applicable to the urbanized living conditions of an industrialized

state. A most effective TV program called "Gardeners' Almanac" made its debut in April and continued through September. This program had the highest rating of any educational TV program carried on Channel 2 and we have a request to repeat the program again next year.

The control and research programs have been modernized during the year to include greater investigation of problems related to urban and suburban living, marketing of food and fiber, consumer demands and interests, food quality, control of diseases and pests of lawns, home gardens and public areas.

Of national interest are the fruits of one control and extension program which has operated since 1923 at considerable cost to the people of the Commonwealth but of great importance to the poultry industry. During the recent flu epedemic, it was determined that only pullorum-free eggs were satisfactory for the production of effective vaccine to combat this disease. Massachusetts was one of a few states where certification of eggs as being pullorum-free could be established without doubt because of the control program that had been conducted in the past. As a result, there was a great demand for Massachusetts eggs for vaccine production. Thus, in a short time the public was well repaid for the investment that has been made for the vested interests of the poultry industry.

The major organizational changes that have been made during the past year that have been most significant for attacking the problems of the future are (1) the almost complete restaffing of the Department of Agricultural Engineering, including a new department head; (2) the transfer of the Department of Entomology and the plant pathology section of the Botany Department from the College of Arts & Science to the College of Agriculture and the joining of those activities with similar activities in agriculture to form a new Department of Entomology and Plant Pathology; (3) the consolidation of the departments of floriculture, olericulture and pomology into a Department of Horticulture; and (4) the appointment of a new department head and two new staff members in the Department of Food Technology. When the impact of these changes has been transmitted throughout the university and the state, it is certain that greater service can be rendered to the public at a lesser cost.

The College of Agriculture is well endowed with scholarship funds to help support students who are worthy and needy. About $20,000 is now available annually for this purpose. In addition, two students received special recognition from outside sources during the past year: Miss Yorkette Solomon, Food Technology 1959, received a $1,000 Gerber Baby Foods Scholarship award, and Mr. Anthony Federer of the Forestry Department has received an $800 award annually for the past two years from the St. Regis Paper Company. In both instances these awards have been made to students of the University of Massachusetts for the first time.

Departments in the College of Agriculture have received outstanding recognition for their research accomplishments in the form of grants from private and government sources in the amount of approximately $70,000 per year. These funds are used to supplement existing appropriated funds in the support of research so that the programs may be accelerated. It is the policy of the College of Agriculture not to accept funds from any source to do work other than that which we would be willing and anxious to do if sufficient appropriated

money were available. In other words, we do not encourage grants for the purpose of testing or other kinds of "hack" work because we do not believe that it provides adequate use of the facilities nor the proper utilization of staff members.

During the past year the College of Agriculture was the recipient of a gift of $50,000 from Red Acre Farms, Inc. for the construction of a new large animal isolation building which has been completed and is a valuable addition to the Veterinary Science Department. Badly needed repairs to the French Hall greenhouse range have been completed on a few of the buildings, and Flint Laboratory has been completely renovated with the result that we now have a modern dairy processing laboratory and production unit. Cranberry mechanization will have an opportunity to be developed further because of the acquisition of a new building at the Cranberry Experiment Station for this purpose.

There have been significant personnel changes resulting from a more liberal personnel policy enacted in 1955. This "Freedom Bill" made possible appointments above the minimum salary, promotions, upgradings, new assignments involving about 140 individuals on the professional staff. These promotions and other changes were effected for the benefit of the individual staff members, but surprisingly enough a net saving was realized. In the changing emphasis in agriculture, several shifts of personnel were effected without any increase in staff numbers or cost but with an actual transfer of positions formerly assigned to the College of Agriculture to other parts of the University. One of the most significant changes has been the upgrading of 12 positions, which were formerly academic year positions, to 12 months' positions so that the staff members could be engaged regularly in an integrated program of research, teaching and extension within the College of Agriculture. This change leaves only 22 positions in the College of Agriculture that are now classified as academic year positions.

Recommendations for the Future

The most important part of this report is an abstract of the proposals for the future for purposes of planning and coordination. The following need to be given careful consideration as we move ahead in the building of a strong program as a part of this University:

I. Regionalization of Programs.

An initial step has been taken in the establishment of a bilateral arrangement with the University of Maine to conduct regional instruction programs in agricultural engineering at Maine, and Food Technology at the University of Massachusetts. This is only the beginning, and certainly not enough.

It is requested that we energetically pursue the policy of establishing bilateral or multilateral arrangements or agreements with various New England Land-Grant Colleges in other fields of instruction. It is also strongly recommended that consideration be given to establishing regional programs in extension, research and control. It is conceivable that an extension specialist carrying on mass media extension programs through TV and radio could be a New England extension specialist and be paid by all states. It is also conceivable that many of our control programs which are operated by individual states could be operated in one location with the elimination of costly duplication in equipment and staff.

For example, one shade tree laboratory certainly should suffice for New England. One seed laboratory should suffice, and so on. A certain amount of regionalization of research has already been initiated, but many improvements could be made in this line too. We should spend a lot of effort in finding out how we can save money in these areas and still improve the effectiveness of the program.

II. Strengthening of Federal-State-County Relationships in Extension Programs.

A cooperative Extension program in agriculture and home economics should be studied from the standpoint of increasing its effectiveness by bringing about closer integration of the programs at federal, state and county governmental levels.

We believe that much could be accomplished in the way of streamlining and reorganization to make a more effective program. Incidentally, the county extension workers have just received belated consideration under the Barrington Associates survey, completely independent of the original survey for state employees. This points up a significant lack of continuity in policy between county extension workers as agents of the University of Massachusetts and the staff members in the University. This whole area of relationship needs to be studied completely and handled with great care so that a stronger program can be developed.

In keeping with the changing agricultural scene, there needs to be a constant increase in specialization of extension workers at all levels which will lead to a substantial increase in their technical competence.

III. Integrated Payroll.

An integrated program can never be a fact until the payroll is integrated. Steps to bring about a complete cooperation between extension, experiment station, instruction and control are rather futile as long as it is not perfectly clear to all persons involved that their pay is coming from the various sources.

We urge that every possible effort be made to completely integrate the payroll so that each activity is appropriately charged for and given credit for personnel costs. For example, the high cost of agricultural instruction, as reflected in a recent survey by the Provost's Office, is not unrelated to the fact that 12 department heads at over $10,000 per year each are charged entirely to the instruction budget rather than being charged to instruction, research, control and extension. We should work on this immediately.

Each year budgets and reports are submitted to federal experiment station and extension offices on the basis of total expenditures in these programs. Since many of the state expenditures are now hidden in our instruction program, the amounts actually spent for research and extension do not show in these reports or budgets; therefore, money which is available to us from federal sources for various programs has to be returned to the federal government because we are not able to show that we are actually expending state funds on a matching basis, which is one of the requirements for obtaining the federal funds.

IV. Expansion of Printing and Duplication Facilities.

The printing and duplication facilities now operated in the College of Agriculture for the benefit of the entire University have about reached their maximum effectiveness because of a limitation of modern equipment and adequate help. This whole problem needs high level administrative consideration if the University is to be adequately served in the future.

We recommend that the University administration consult with us about our proposals and prepare to make the necessary expansions after a thorough discussion of the problem.

V. Accreditation of the Landscape Architecture Department.

We should move vigorously in the direction of expanding the staff of landscape architecture to include instruction and service in programs of city and regional planning with the view that the Landscape Architecture Department will then receive full accreditation from the professional societies. This will place the Landscape Architecture Department in a position of serving as a regional school for New England and would strengthen their already fine program to the point of serving the people of this Commonwealth more satisfactorily

VI. Service To Other State Departments and Public Institutions.

We should encourage cooperation between the University and other departments of the state government in areas where our staff and facilities are uniquely adaptable to this service. For example, we should encourage the departments of agronomy, horticulture, entomology and plant pathology, and others to cooperate with the Public Works Department in their problems relating to the control of weeds, development of turf and landscape, control of insects and diseases on the 2200 miles of public highways in the Commonwealth.

Similar cooperation between departments and other state departments is indicated and need not be discussed in detail here. We should have an all-out effort to inform the various state departments what we have available and encourage cooperation with them. This interchange of ideas could be developed most effectively between the University administration and the heads of the various departments of the state government.

VII. Salary Adjustments.

This subject has been put at the end, not because of its unimportance, but rather to emphasize that none of the other things that precede this discussion really are of any consequence unless a realistic and equitable salary policy is developed.

In last year's report it was emphasized that standardized salary adjustments as have been experienced over the past several years led to a policy of standardization which, in the long run, was not satisfactory for a professionally staffed program. The first consequence of this standardization has been the "arbitrary cut in salary" imposed on some of our most deserving staff members by the $1,000

limitation in connection with the salary schedule recommended under the Barrington Associates report.

We recommend that an attempt be made to get the next salary increase for the professional staff on the basis of an evaluation of each staff member's contribution to the total program rather than an across-the-board increase for all staff members. We recognize that this is not the traditional way, but we think it has definite merit and if it is remotely possible to accomplish this all of us would be more than willing to expend the energy required for the evaluation.

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Dale H. Sieling
December 5, 1957

Annual Report, 1956-1957
School of Business Administration
University of Massachusetts

December 2, 1957

Prologue

Professor Milo Kimball resigned his position as Dean effective February 1, 1957. Dr. Shannon McCune, Provost, became acting Dean until a successor to former Dean Kimball could be appointed. I accepted the position as Dean of the School of Business Administration in April of this year, the appointment to be effective as of July 1, 1957. This annual report, therefore shall have all the advantages and disadvantages of a newcomer. A change of administration always induces discernable and subtle differences in outlook and in expectations, particularly if the newcomer is from an outside institution. And although the University of Maine is a New England Land-Grant University, still there are notable differences in the character, the outlook and the spirit of Maine and Massachusetts. Being originally from the Far West I have been met by the spirit of adventure and open handedness that has characterized the West, at least in the beginning. No one can be here long without noting a surge of expansion, getting ready for the future and an optimism characteristic of pioneers pushing forward into new territory. Whether this is too sharp a break with the past, too fast a pace for the more conservative, too rapid for the protection of quality of instruction and staff is certainly not for me to answer now but to notice and take into account. It will indeed be a tremendous satisfaction if Massachusetts can couple rapid development with high quality performance on both the undergraduate and graduate levels.

Specifically the School of Business Administration fits into this picture because it too is growing and has all the significant growing pains of a young School dating only from 1948. But in this time there was established a curriculum, a number of "major" areas such as Accounting, Finance, Industrial

Administration, Marketing and General Business Management; a minimum structure of organization, a faculty and Dean, a secretarial office, a student body and some teaching equipment. All this is essential but of course it takes more than this to create a strong School with prestige, status and high quality. Three factors must be present to accomplish this:

1. An outstanding faculty, selected on the basis of education, experience, intellectual stimulation, conviction and professional pride.

2. A student body selected for aptitude in the fields of Business Administration and Economics and encouraged to do work of high calibre by a faculty imbued with the importance of teaching and research.

3. A Dean, as part of the total Administration, that sets a climate and atmosphere conducive to the highest academic accomplishment. An administration that recognizes members of a faculty as professional people, not as employees in the rank and file sense. And the Dean who must recognize each faculty member, irrespective of rank, as equals in responsibility to the welfare of the School, the teaching program and research. The test of strength of an educational institution is not rank and authority but quality of performance and status of the profession.

It is fitting for a Dean to set forth his general philosophy to indicate the direction of his thought as a measure of his own performance. To achieve something will take time but "the something" should be discernable within a year. On the other hand the School of Business will not take its place among the top Schools of the country for some time. In the first place, we have not the "wherewithall" to work with yet. In the second place, we have not the outstanding reputation yet to attract the best among the market for instructors as we expand, and, in the third place, it will take time for the faculty members we have to behave as if they are in a first rate institution.

In this prologue, before I come to the more prosaic section of this report, I might venture the opinion that it was a great mistake when Economics was separated from Business Administration. This has happened in many places, but wherever it has happened it has been a mistake. Your Dean, in view of this has

been diligent in establishing cooperation with the Department of Economics through Professor Gamble. We have a long way to go for real effective cooperation which to me means, not so much, socializing, although that is important, but working together in coordinating our course programs and in achieving an intellectual rapport worthy of the name. Toward that end Professor Gamble and I have each selected two representatives that are voting members of each other's faculties. I have found Professors Bruce Morris and Marshall Howard very helpful in our faculty meetings. But this is only a small beginning towards effective cooperation. The rejection of our School last year as a member of the American Association of Collegiate Schools of Business was a blow to our pride that can be overcome rather soon, I hope. Within a short time I shall make efforts to reopen our case and, with the aid of Dr. McCune, we shall again seek membership. I need not discuss the many problems left by the rejection but certainly some suggestions of the Association are now being met.

Enrollment

Using fall semester figures the undergraduate enrollment of our School increased from 326 in 1950 to 516 in 1957. This is an increase of about 59%. During the same period the University increased 45%. I do not include graduate students of which we have had between 8 and 15 since 1953 when the graduate program began. That the undergraduate enrollment will expand I have no doubt, although there has not been any significant rise since 1955. Indeed the enrollment was higher in 1954. Even so our enrollment is about 13% of the University total. Recently Mr. Lanphear has estimated our enrollment for 1958-1959 as slightly less than it is now. I am in no position to be critical of these estimates, but I should guess that they are too conservative. But even if they are not too conservative I would say that an increase in most other parts of the

University will mean an increase of both our own student body and the number of students that register for our courses.

We are one of the few Schools and Colleges that is more likely to have more juniors and seniors than freshmen and sophomores. Please see Tables 1 and 2 on pp. 10, 11. A smaller freshman class does not mean a shrinking of our enrollment. This is due to two main causes. First, many students who begin a program in another School or College, particularly the School of Engineering, transfer by the end of the sophomore year. Second, we get transfers from other colleges in the State.

In considering the impact of enrollment on our program and faculty it must be remembered that we offer only a one-semester course (given each semester) for freshmen. This uses the equivalent of one full time instructor. We teach only a one year course for sophomores that uses the equivalent of 2¼ full time instructors. This means that, at the moment, eleven and three-quarters of our instructors teach juniors and seniors and this enrollment increased 70% since 1950. Although we do not offer many courses for the first two years, this being the area of the student's general education in the College of Arts and Sciences, we do advise these students. Out of a total enrollment of 530 (including 14 graduate students) each faculty member has an average of 35 students each as advisors and this includes the Dean. I have looked upon this as part of my education both in knowing the procedures and knowing the students, their courses and their problems.

Since our enrollment can rise from both an increase in freshmen and upperclassmen I cannot avoid raising a more general issue. Many, but not all of our transfers, might have registered with us in the first place. Somewhere advising was faulty, particularly in those cases where engineering aptitude was involved. It must be a heavy cost to carry along too many students who find

that engineering was not meant for them. The capital cost per student is higher in engineering than many other programs. I do not mean that our engineering transfers always do well. They do not. A failing student is both a cost and a tragedy no matter where he might be, but the cost is heavier in the sciences and in engineering, considering the costs of equipment and laboratories, not to mention instruction.

The Faculty

There have been many changes in the staff these past few years. There are times when turnover is essential but we have had a higher per cent than is desirable, both at the top and the bottom of the ranks. I am not including those resignations that appeared necessary. A strong School must have a core of excellent men around whom new men can cluster and find a place within the School if continuity is to be achieved. Since 1956 there have been a number of "new faces": Professor O'Donnell, Assistant Professor Drew-Bear, Visiting Lecturer Kyler, Instructor Fitzgerald and your new Dean. These men replaced Professors Colwell and Vance, Associate Professor Unger, Assistant Professors Gillis and Sherman and Instructor Robinson. Professor Kimball remained to teach.

The best "training" place for a new faculty is one with intellectually stimulating people when bold imaginations and creative thought can have free play. No one should ever discourage even the "crackpots" among us in the circulation of ideas for fear that we might discourage those with something vitally important to say and to teach. Although higher salaries are needed and the drive for them goes on and on and should, the fact remains that I know of many places where excellent men stay because the academic environment is conducive to creative activity and creative thought. To tap such sources of strength is the chief problem for a University and a School of Business Administration.

Good men must be well trained and trained in the way that is recognized by our profession. An Abraham Lincoln did not need a college education, nor did some great musicians, poets, novelists, painters and businessmen any one might mention. The doctor's degree or its equivalent must be our normal measure of an academic education and where it is not we must be diligent enough and flexible enough to admit it and take a man for other outstanding qualities as "the equivalent." Any real danger of excessive reliance on the doctor's degree is a problem of administration to solve.

There are 15 of us on the staff. Seven have the doctor's degree (Hackamack, Hardy, Kirshen, Kyler, Ludtke, Rivers and Singer), one (Anderson) has the equivalent (M.B.A. and C.P.A.), one (Lentilhon) will have his C.P.A. within a few months. Two are working on the Ph.D. (O'Donnell and Zane). Professor Kimball will retire the end of this semester. We have appointed John Conlon as an assistant professor and he will join us in the spring. He expects his Ph.D. from Michigan State University next summer. Dr. Kyler, a Visiting Lecturer, on leave of absence from Bethany College, will leave the end of this semester. To help fill the teaching gaps left by Professors Kimball and Kyler we have appointed two part-time people, Randall Haydon, one of our very good graduate students, and William Hefner, who will be a part-time Lecturer in Accounting. Mr. Haydon will teach Corporation Finance. Considering that this is not the best time to survey the market for good men, we are fortunate to have Haydon and Hefner for the spring semester. Mr. Hefner taught Accounting here before and left as an assistant professor to devote full time to his accounting office in Greenfield.

There is considerable strength in our faculty but we have a distance to go in building up our staff. We are wasting much of our strength by having little

to offer for research and consultation. This is, in part, my job. In part it is a matter of funds and encouragement. In part it is a matter of creating a Bureau of Business Research. Actually I would prefer to have Economics in on this too and create a Bureau of Business and Economic Research. There must be a place where those who call upon us can come, and there must be the machinery to carry through such research (a director, equipment, secretarial help and so on). The most desirable thing costs money but research is worth the cost. There must be opportunity for the staff to carry on investigations and a Bureau would be a significant help. Indeed two of our men, one who left us (Professor Colwell) and Professor Hackamack carried on significant research for the Department of Agricultural Economics this past year. Professor Hackamack's study of Managerial Efficiency in the Dairy Industry has received widespread acclaim and there have been many calls for copies.

Professor Ludtke is writing a text in Financial Institutions and has recently sent a manuscript on Variable Annuities to The Journal of Finance for appraisal and possible publication. Professor Hardy has completed a study of the Pioneer Valley Industrial Area. This has been published. Professor Singer has had two articles published in The Journal of Accounting. Assistant Professor Rivers completed his thesis in the field of transportation and received his Ph.D. this past summer. Professor O'Donnell is working on his Ph.D. thesis and is studying Executive Decision Making. Associate Professor Hackamack completed his Ph.D. thesis in the field of Collective Bargaining and Industrial Management and received his degree in 1956.

We obviously need to develop the area of writing and publishing much more than we now have although we have made a pretty good start.

Administrative Structure

Since September a few structural changes have been effected within the School of Business Administration. Being a firm believer in faculty participation in the work of the School, proposals were discussed and a Policy Committee was established, the four members to be selected by the Dean to advise the Dean on matters relating to the School. Since its establishment we have met each week. One of our recommendations was for the establishment of a Curriculum Committee and this was voted a short time ago. The Committee will make recommendations to the faculty on course programs and receive all proposals for changes in the major areas of study.

We have no departments as such and hence no department heads. I am well aware of the problems of departmentalization, having been a department head for 20 years myself at the University of Maine. The dangers of specialization I know and the tendency to split courses further and further I know too. The fact remains that as a School grows there is need of fixing responsibility and allocating authority to distribute the administrative load. This is just good organization in spite of any disadvantage involved. One way to test a faculty is to find out who has administrative ability, who can work effectively with his colleagues and who has the stamina to "take" responsibility and maintain it. I have therefore appointed chairmen of major areas of study. These "chairmen" are to have no power nor authority over anyone. To clarify their functions I have sent each a memo you will find on p. 12. You will also find the names of both the Policy Committee and Curriculum Committee on pp. 13, 14.

We have not lived long enough with our newly established Committees to measure their worth nor determine their real effectiveness. There is every reason why they should function well, given support by the Dean and the Faculty of the School.

In a larger sense these experiments are preparatory to possible departmentalization at some future date. Indeed there is no reason why a School of Business Administration should be in any different catagory than other divisions on the campus, given the students enrolled, the broad specialized areas, or "majors" and the total volume of work to be allocated and the expansion of the faculty. As a matter of fact when I came here I found a kind of "unofficial" departmentalization already in operation. The "senior man" or full professor just naturally assumed the headship. I preferred a different system and one I could test. Furthermore, I was not certain that the "unofficial" heads should be the actual ones so my appointments as chairmen are for one year and on an experimental basis.

Conclusions

I have not been here long enough to come to any conclusion except as mentioned throughout this report. I can say that we have good men but not a strong School. We have a good start at effective organization but we do not yet have much of a reputation either on or beyond the campus. Until we stop the notion that we are a "dumping" ground for poor students we shall certainly not achieve prestige among the better students or our colleagues. We have only made a start in establishing relations with industrial firms but this will come. We need only show interest and have something substantial to offer in research and consultation. We must make ourselves known better among the men in other Schools of Business Administration. How one's professional colleagues feel about us and our program is very important, particularly when we wish to compete for good men in a scarce market. In short we want the School, as we want the University, to be among the best in the country.

H. B. Kirshen

HBK:EA

Table 1

SCHOOL OF BUSINESS ADMINISTRATION - MAJORS

SEPTEMBER	Acct.	Fin.	Gen. Bus.	I. A.	Mktg.	Merch.	Total
1952							
Seniors	15	6	20	5	24	5	75
Juniors	22	9	20	16	24	6	97
Sophomores	13	3	78	11	29	6	140
Freshmen			110				110
Total	50	18	228	32	77	17	422
1953							
Seniors	17	11	14	11	24	3	80
Juniors	26	7	30	25	41	7	136
Sophomores	29	6	51	17	21	5	129
Freshmen			132				132
Subtotal	72	24	227	53	86	15	477
Grad.							8
Total							485
1954							
Seniors	25	7	17	19	36	5	109
Juniors	39	6	48	22	14	9	138
Sophomores	39	5	68	36	15	3	166
Freshmen			148				148
Subtotal	108	18	281	77	65	17	561
Grad.							11
Total							572
1955							
Seniors	36	10	39	20	8	7	120
Juniors	54	8	45	32	25	2	166
Sophomores	30	4	62	16	10	7	129
Freshmen	3	3	84	2			92
Subtotal	123	25	230	70	43	16	507
Grad.							15
Total							522
1956							
Seniors	43	17	44	33	27	1	165
Juniors	36	9	50	20	10	2	127
Sophomores	29	4	46	15	8	7	109
Freshmen			112				112
Subtotal	108	30	252	68	45	10	513
Grad.							14
Total							527
1957							
Seniors	30	13	44	25	12	2	126
Juniors	42	11	34	30	9	6	132
Sophomores	17	3	88	19	4	6	137
Freshmen			121				121
Subtotal	89	27	287	74	25	14	516
Grad.							14
Total							530

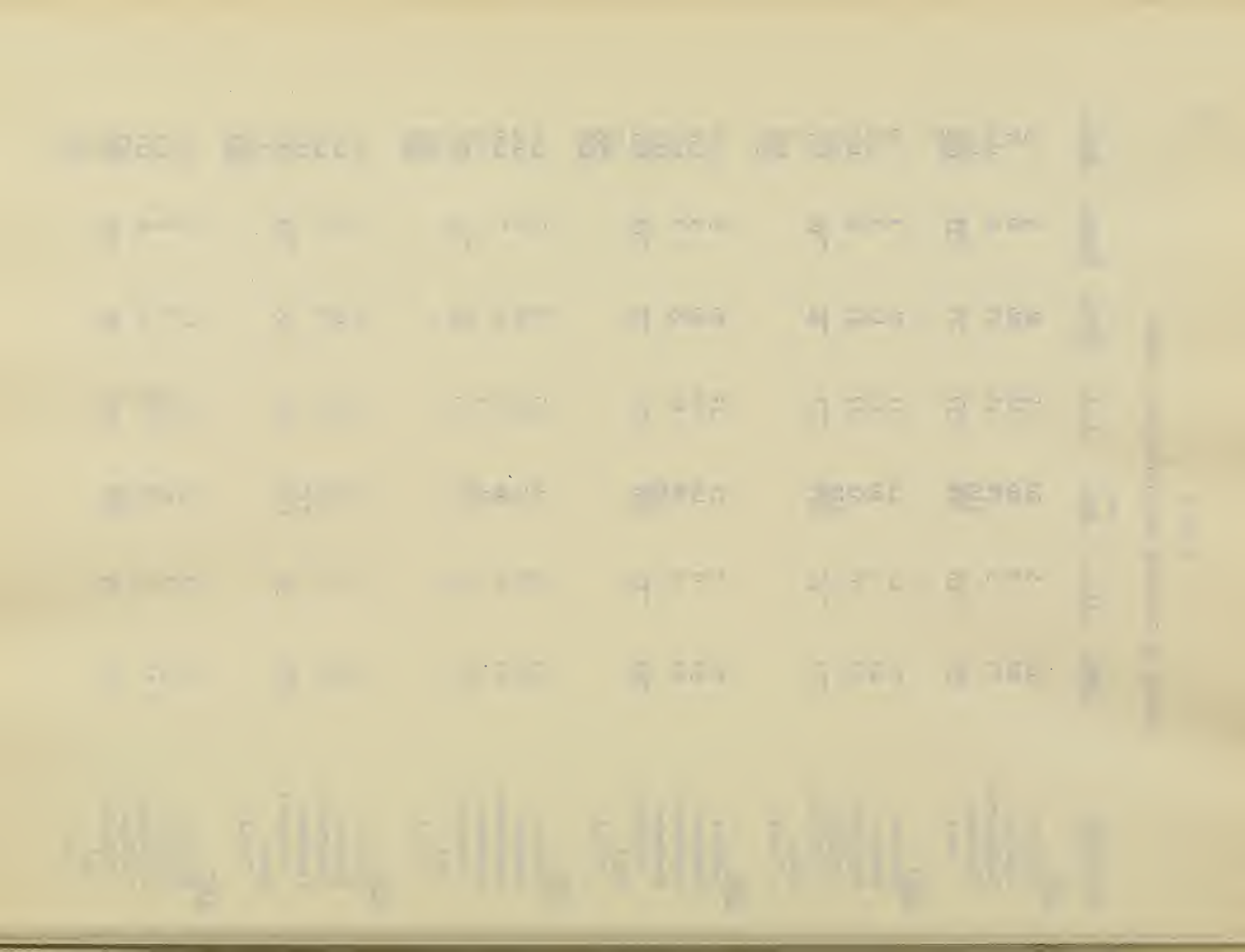

Table 2

SCHOOL OF BUSINESS ADMINISTRATION - MAJORS

	1952-53		1953-54		1954-55		1955-56		1956-57		1957-58	
	1st Term	2nd Term	1st Term	2nd Term	1st Term	2nd Term	1st Term	2nd Term	1st Term	2nd Term	1st Term	2nd Term
ACCOUNTING	50	51	72	76	103	102	123	108	108	100	89	
FINANCE	18	19	24	25	18	19	25	32	30	33	27	
*GEN. BUSINESS	228	230	227	234	281	267	230	238	252	273	287	
IND. ADMIN.	32	30	53	61	77	75	70	74	68	72	74	
MARKETING	77	73	86	76	65	58	43	48	45	47	25	
MERCH.	17	12	15	18	17	16	16	10	10	10	14	
SUBTOTAL	422	415	477	490	561	537	507	510	513	535	516	
GRAD.			8	7	11	13	15	17	14	11	14	
TOTAL	422	415	485	497	572	550	522	527	527	546	530	

* All freshmen are listed under General Business

University of Massachusetts
MEMORANDUM

FROM Dean Kirshen DATE October 3, 195
TO John Anderson, Harold Hardy, Walter O'Donnell, Robert Rivers

Each of you has been appointed Chairman of a major area of the School of Business Administration. At the first meeting of the Policy Committee we discussed very carefully and long the meaning of "Chairman." I shall now attempt to clarify that meaning.

First of all, as we know without too much discussion, we have no departments, therefore no department heads. Knowing this a chairman cannot be or act like a department head either within or outside the School. We cannot, honestly, give a false impression either to our colleagues or to students or to people off the campus. In a sense this is a negative approach, albeit an essential one. Then what is a Chairman? Is that a good title? Is adviser or coordinator better? To me, any word can be given any meaning the user wants. At Massachusetts one in charge of a department is called "Head", therefore, I concluded that Chairman as a word is safe and it is if we know what we mean by it.

Then what is a Chairman? Well, we can assume that the staff members in a major (Accounting, Finance, Industrial Administration and Marketing, leaving out General Business at the moment) constitute a committee and the chairman is chairman of that committee. He has no power to act on his own. If he gets the group together he stands no higher or lower than anyone in the group. His rank plays no part. If he proposes a program it is for discussion only. There can be no power to insist that anyone follow the program. The chairman, like anyone else has only his personality, force of his character, competence as a person and persuasiveness of his arguments to induce consent. That and nothing more. But this is a lot. To induce consent without power is difficult for anyone. It is easier to achieve consent with the use of authority. But for professional men authority should be a means of achieving the purposes of the School and not a symbol of force or compelling consent. At least this is the ideal. (Pardon the lecture. You do not need it, but I am trying to clarify the position of a Chairman).

Suppose, it has been stated, there is a majority and a minority in a major area concerning some problem that has arisen. What then? Can the Chairman ignore the minority or if he is on the minority can he overrule the majority? The answer here is obvious. He can do nothing that as an individual he cannot do. He cannot compel consent by giving anyone a take it or leave it alternative. Whenever staff members of an area cannot settle an issue within that area I am still around and will help out or mediate or decide, if necessary, to get the work of the School done.

Another point. How far does the rank of a chairman or anyone else determine the outcome of an issue? My answer is this. Rank has nothing to do with power and authority, unless the official authority is there to begin with. A Senior rank of a faculty member generally reflects his experience, his competence, and his position as a professional person. In any major area an instructor has the same privilege to discuss, complain, suggest and vote. He is an academic citizen. I shall recognize no status higher than this. If members of the staff, as a matter of respect for experience and competence want to defer to anyone, that is normal and necessary in the academic world as elsewhere. In my experience younger men can quite often contribute tremendously to the strength of a School or department or committee. There are times when we older professors might be so bound to tradition we cannot be sensitive to change. We need the younger ones to poke us a bit and add alertness to our dignity born of longer experience.

Another thing we might remember. The chairmen are appointed for a term of one year with reappointment possible. This in itself indicates the nature of the position.

H. B. Kirshen

University of Massachusetts
M E M O R A N D U M

FROM: Dean Kirshen DATE: October 1, 1957

TO: Staff, School of Business Administration

I have spent considerable time about appointments to our newly established Policy Committee. Whether the amount of time is in any way related to the justice and future effectiveness of the results must remain in every man's conscience for judging. The Policy Committee is an experiment in administration and the members are part of that experiment. Although it appears that the members represent particular major areas, that was not my original intent. It merely worked out that way. It could hardly be otherwise since all of you identify yourselves with an "area" rather than an unspecialized major.

Appointments to the Policy Committee for one year(reappointment possible) are:

Lawrence Hackamack
Harold Hardy
James Ludtke
Frank Singer

In my thinking about our School I realize that I must concern myself with particular majors as they have grown here and have decided to appointment chairmen for each of the areas of Accounting, Finance, Industrial Administration and Marketing. I have not overlooked General Business Management, but frankly do not yet know what the area really means. We shall await a clearer notion of GBM. The chairmen named shall have the same term as we voted for members of the Policy Committee. Here, too, I originally planned to set forth a statement clarifying the responsibilities of a chairman. Since we do not have departments, a chairman cannot be a department head. Beyond stating that fact I shall leave the clarification of the status of a chairman until I meet with the chairmen. After that we shall report to the faculty.

Appointments as chairmen for one year with reappointment possible are:

John Anderson..... Accounting
Harold Hardy..... Marketing
Walter O'Donnell... Industrial Administration
Robert Rivers..... Finance

H. B. Kirshen

HBK:EA

University of Massachusetts
MEMORANDUM

FROM: Dean Kirshen DATE: November 25, 1957

TO: Faculty, School of Business Administration ; Messrs. Howard and Morris

At our last meeting a Curriculum Committee was established to consist of five members, one from the Policy Committee, one from the Area Chairmen and three at large. The members of that committee are:

Robert Drew-Bear
Rudolph Kyler
Walter O'Donnell
Frank Singer
Harold Smart (Chairman)

For purposes of making recommendation to the faculty, the Committee has jurisdiction to consider any changes in courses or major programs both in the first two and the last two years. In view of the faculty vote on our freshman course I suggest that the Committee consider our whole program within the first two years prior to other matters.

The jurisdiction of the Committee does not preclude recommendations coming to the Committee from individual members or from the separate major areas or from the Policy Committee.

H. B. Kirshen

HBK:EA

University of Massachusetts

THE SCHOOL OF ENGINEERING, 1956-1957

This year completed the first decade of the School of Engineering in the University. Thus some reference will be made in this brief report to the past ten years as well as the year just completed and the future.

1956-1957 saw the enrollment rise to 904, thus continuing our position as the largest professional school in the University. This places us about 85th among the engineering schools of the country with E.C.P.D. accredited curricula. The year was marked by the careful review of the social-humanistic content of our curricula and recommendations were made for certain increases. Industry-university relations were strengthened by faculty employment during the academic year and the summer, part-time employment of an industry engineer on the faculty, the organization of the General Electric-Pittsfield Engineering Apprentice Program, and various industrial scholarships and grants. Our graduating engineers were sought by representatives of 139 companies and the average monthly starting salary was $473. The first course in Nuclear Engineering Ch.E. 83 was offered by Professor Marcus.

Significant information concerning the School is distributed to the faculty as sheets attached to memoranda to the staff. Some of these of the past year are included as figures in the Appendix to this report.

Engineering Education

The engineering profession continued to study and evaluate engineering education and its problems through committees of E.C.P.D., the A.S.E.E., and the various professional societies. One of the most difficult problems is that of the impact of ROTC on engineering curricula. Here "the engineering student taking advanced military science is in effect pursuing two curricula simultaneously with separate and different requirements and objectives." In many schools ROTC credit toward a degree is restricted. After several conferences between representatives of the Armed Forces and leaders of engineering education, however, agreement has not been reached. Also, during the year a committee of A.S.E.E. began a study of the "Development of Engineering Faculties." Their first report will be concerned with "Salaries and Earnings of Engineering Teachers, 1956." A significant report of the A.S.C.E. Task Committee on Professional Education was completed during the year. The student and his first job were given attention by the publication of "Recruiting Practices and Procedures" by A.S.E.E.

The Faculty

Our instructional faculty numbered 38½, with one added in February and one on leave working for his doctorate. The attached organization chart, Figure 1, indicates their rank and departments. Figure 2 shows their educational background. Eight and one-half members of our faculty were new this year. Six and one-half resigned as of June 1957, one retiring, one going on for graduate work, one on leave to industry and the others taking employment in industry. Several second-semester seniors with advanced standing in electrical engineering were given half-time instructorships and did fine work. We were particularly short-handed in this department. The fact we held many of our better young men speaks well for the general morale of the departments and the School.

Recognition

Practically all of our faculty belong to one or more professional engineering societies. Some hold responsible positions in these groups. Dr. White was secretary of the executive committee of the Applied Mechanics Division of the American Society of Civil Engineers and a member of the Structural Dynamics Committee. Dr. Lindsey was on the Equipment Testing Procedures Committee of the American Institute of Chemical Engineers. Professor Weaver was a national director of the Society for the Advancement of Management. Dean Marston was a member of the Educational Policy Committee of the Civil Engineering Division and the Westinghouse Award Committee of the American Society for Engineering Education. Professor Dittfach was elected to a 5-year term on the Placement Service Committee of the Society of Automotive Engineers.

Publications

Our faculty have been reasonably active in the field of publications as indicated by Figure 3 which lists those that have appeared in recent years.

Industrial and Other Activities

Our faculty are employed on an academic-year basis which gives them time for other professional activity. This is the general pattern of employment of engineers in education through the years, and some colleges which have tried 12-month contracts are returning to the academic-year basis. It has many advantages and with our best teachers is a major factor in keeping them in engineering education. Consulting, concentrated research further graduate study, industrial employment are all broadening experiences.

The following illustrates the activities of our faculty. Dr. Cashin continued his consulting work with the Army Chemical Center in Maryland during the year and also worked on his National Science Foundation research project. Mr. Goodchild continued his graduate work and worked with Dr. Cashin on the N.S.F. project. Professor Sharp was an engineer for the second year at the Oceanographic Institute at Woods Hole. Professor Dittfach worked as an engineer for the Worthington Corporation in Holyoke during the year and the summer. Professor Edwards had a similar arrangement with the Westinghouse Electric Corporation in Springfield. Professor Day had a contract with the Aircraft Engine Department of G.E. in Lynn for the year and also attended the G.E. two-week professors' conference at West Point. Mr. Spencer worked for Grumman Aircraft on Long Island

during the summer and did some free-lance architectural design. Professor Weaver was a consultant with Industrial Advisors of Western Massachusetts. Professor Sobala taught at Hillyer College and did some consulting for R. M. Hallam Company of Springfield. Professor Keyser worked on a revision of his widely used "Basic Engineering Metallurgy." Dr. White worked on his Air Force Research Contract and traveled in Europe during the summer. Dr. Osgood and Mr. Daialo also spent the summer on the Air Force Research Contract. Professor Crow taught summer school and did some work on the Air Force Research Contract. Mr. Benben spent the summer in Greenland on a foundation project for the Air Force. Dr. Feng was consultant for Tighe and Bond of Holyoke. Professor Hendrickson was a consultant on foundation problems for Holyoke Water Power Company and others. Professor Marcus attended an 8-week A.E.C.-A.S.E.E. summer nuclear science institute at the laboratory at Ames, Iowa. Dr. Bates was a consultant for Brooks Jarrette Company of Pittsburgh. Professor Smith was an engineer with the M.I.T. Lincoln Laboratory at South Dartmouth. Professor Langford worked at the Lincoln Laboratories in Lexington on computers. Professor Patterson worked as an engineer for Package Machinery of East Longmeadow during the year and in the summer. Several of our faculty taught summer courses. These included Dr. Lindsey, Dr. Duus, Professor Boyer, Professor Costa and others. Prof. Higgins was an engineer with Metcalf & Eddy, consulting engineers, Boston.

The Students

Engineering continued to attract about 42 percent of the boys admitted to the freshman class in September 1956. We do get more than our share of good students. Figure 4 shows a "Summary of Academic Record of Engineering Students, June 1957." Figure 5 is a statement concerning "Academic Standards for the School of Engineering."

Student Activities

Student Chapters of A.S.C.E., A.S.M.E., A.I.E.E. and I.R.E., and A.I.Ch.E. provide excellent opportunities for student leadership with professional affiliation. Engineering education is uniquely fortunate in having this aid. Tau Beta Pi continued its stimulating influence among the engineering students. The Engineers' Council under the very able leadership of John R. Picard, 1958 E.E., carried on effective student leadership, especially in handling the Engineering Open House and a fine Student-Faculty Dinner Dance at the Hotel Northampton.

David A. Sherman, 1957 E.E., was the first Rhodes Scholarship applicant from the University in several years. Rexford Wilson, 1957 E.E., won the regional I.R.E. student paper contest at R.P.I., and David J. Beaubien ranked 2nd in the A.I.E.E. regional student paper competition at Pittsfield. A student engineering news sheet "Epsilon" appeared during the second semester. We had two Tau Beta Pi Women's badge holders -- Peggy Nicholson, 1957 E.E., and Doris T. Grimes, 1958 Ch.E.

Placement

Our engineering graduates took employment with 66 different companies or organizations, as shown by Figure 6. About ten percent are known to be continuing graduate studies at M.I.T., R.P.I., Northeastern, University of Illinois, University of Tennessee and University of Cincinnati and elsewhere. Demand for our engineering graduates continued very high with starting salaries ranging from $374 per month to $600.

Summaries

The following summaries will give a picture of our enrollment of majors, graduates, length of academic careers and record of graduates. Figure 7 shows the School of Engineering Enrollments by classes for the past ten years. Figure 8 shows the Bachelor and Master Degrees awarded in the School of Engineering by majors for the past ten years. Figures 9 and 10 summarize this data graphically. Figure 11 is a statement about the "Academic Careers of Engineering Graduates of Classes of 1955 and 1956." Figure 12 is a summary of the results of a "Five-year Questionnaire (Class of 1951)."

Industry-University Relations

This year was marked by several significant industry-university projects by the School of Engineering. Part-time employment arrangements, one day a week plus vacation and summer, were worked out for various of our younger faculty people with Westinghouse Electric Corporation in Springfield, General Electric Company in Lynn, Worthington Corporation in Holyoke and Package Machinery Company in East Longmeadow. This was in addition to the usual consulting relations established by other faculty members.

The Western Massachusetts Electric Corporation made available the half-time services of one of their senior engineers. We compensated the corporation at the rate of a half-time assistant professor salary.

G.E. Program

A formal trust fund agreement was developed with the General Electric Company in Pittsfield to offer courses in that city. The plans provide for the first two academic years of our electrical engineering curriculum to be offered over a four-calendar-year period for G.E. engineering apprentices who meet our entrance requirements. Additional courses for advanced students who were formerly in our previous extension program will be provided on a self-supporting basis. Mr. Robert J. Doolan, formerly of G.E., was employed as director of this extension program.

Scholarships

At the end of the year the Westinghouse Corporation plant in Springfield made four $250 scholarships available to students in the School of Engineering for the year 1957-1958. The Kollmorgen Corporation of Northampton provided a tuition scholarship. The Engineering Alumni Scholarship Fund supported ten tuition scholarships during the year.

Research

Dr. Cashin received a grant from the National Science Foundation for a study of the "Relationship between Heat Transfer and Quality of Fluidization in Gas-Solid Fluidized Systems." Dr. White undertook a U.S. Air Force research project on the "Effect of Secondary Bracing on the Resistance of Structures to Blast."

The Physical Plant

Chemical Engineering

The contract was let for the $2,000,000 Chemistry Building which should be completed by September 1958. This will provide fine facilities for most of our Chemical Engineering Department.

Engineering Building

The laboratories in this building were completely set up during the year and are operating very satisfactorily. With the opening of Machmer Hall most of the non-engineering classes were moved out. Thus all engineering classes were held in this building and Gunness with the exception of some chemical engineering work and the steam laboratory instruction in the Engineering Annex and some freshman drawing classes. The loss of our largest drafting room in the Engineering Annex to the College of Agriculture forced us to use two adjacent classrooms in Machmer. We continue to have one large drafting room in the Engineering Annex.

Equipment

Major additions to our equipment during the year included an electroplating unit, a Beggs deformetor, two strain gage analyzers, an analogue computer, Sanborn recording equipment for use in servomechanism and transient experiments, a 40-hp educational turbine dynamometer set, a Zeiss self-leveling level, an oscillograph film processer, an XRD-5 unit for X-ray diffraction and fluorescent analysis, and a torsiograph. The General Electric Company made $7,000 worth of equipment available to us. This was in addition to the $40,000 worth the previous year.

Engineering Shop and Drafting Room Building

Considerable thought and planning was devoted to this project by a committee of the School. It is still in the budget stage but we did crystallize our thinking on several matters.

Problems of the Future

This section of the 1955-1956 report of the School of Engineering could well be repeated and will be with some variations. Some progress has been made in a few areas, yet some have not even been touched.

Faculty

The University anticipates rapid growth in the next ten years, and there is every indication that the problem of attracting well-qualified faculties, especially in the sciences and engineering, will be a most difficult one. There are just not enough good instructors available even today. Vacant positions have existed in the School of Engineering for the past three years because we could not find engineers to fill them.

All administrators concerned with the problem must recognize that every effort must be made to make positions at the University attractive to faculty. Salaries must be raised, especially at the higher ranks. Salary differentials based on the supply and demand of faculty in various areas may have to be recognized even though it upsets the

administrative routine. For younger men in engineering education, department heads and deans must provide attractive opportunities for professional growth and development. This may take the form of research projects within the school, a graduate program, and contacts with industry leading to part-time employment or consulting and others.

Talk of a 12-month operation of the University has hurt us in attracting faculty. As has been pointed out, the greatest financial contributors to higher education in this country are the faculty. Engineers in education supplement their income as well as their professional competence by consulting, research, industrial employment, writing, etc. Without summers or similar time off even fewer engineers will be attracted into education. It should be remembered by all that very few engineers select their professional field with a thought of teaching. This is quite in contrast to scientists and certainly those in the humanities and social sciences.

Research

An engineering faculty should be made up of educators of differing interests and ability. Their professional activities can be classified as teaching, consulting, research and administration. Basically such men are on a faculty because they are interested in teaching. Yet some are real scholars and keenly interested in research. Others find more of a challenge in helping to solve the technical problems of industry and government by consulting activity. This is often engineers' keenest interest. Most faculty members have very limited administrative responsibilities.

Research work on a project basis has increased during the year. Compensation at the rate of 1/200th of a faculty man's annual salary per day has been helpful although consideration should be given to increasing this to bring it into line with his actual teaching rate. Our present problem is to attract sufficient faculty to reduce teaching loads so that staff members can do research. The projects themselves must be of interest to the faculty member and really be of his free choice. It is doubtful if research can be really successful when faculty are assigned to it. Graduate students can be of great help and are almost essential to a successful research program. Sponsorship by industry or government is necessary and in most cases will come as the result of direct contact by the staff member.

It might not be unrealistic to think in terms of an average faculty member's professional responsibilities as three and one-half days teaching, one day for research and one day for consulting. His consulting activity would result in additional income, while his teaching and research would be his obligation to the University. If he carried research in place of consulting he should be compensated for it. Some will teach five days a week and do no research, others will teach only two days a week and do research for three days. Neither should be looked upon as making a greater contribution to engineering education. It should never be said that the era of the great teacher at the University of Massachusetts is past.

Graduate Work

An evening graduate program in Mechanical Engineering is being offered on our campus. It is in its fourth year and coming along slowly. Western Massachusetts industry employs many engineers, some of whom are interested in continuing their education toward a master's degree. The opportunity for graduate education in engineering is a "lodestone" attracting many young engineers to areas where it is available. Evening graduate programs in Chemical and Electrical Engineering should be offered when the demand builds up. Here again we must have sufficient faculty to make an evening program possible. Staff members cannot be asked to teach days and evenings also. Their schedules must be adjusted to keep their work programs within reason.

Resident graduate work should be developed as soon as possible. It is a source of part-time teachers as well as research assistants. Here again the problem hinges on attracting sufficient high quality faculty.

Engineering Extension

Engineering extension for small industry in the state somewhat similar to that in Pennsylvania, Indiana, Oklahoma and other states, may be an important factor in maintaining Massachusetts in an industrially competitive position. This should center in our School and would offer an opportunity to be of real service to the State at a very modest outlay of funds.

New Curricula

Our School of Engineering offers the five most popular engineering curricula as indicated by degrees awarded in E.C.P.D. accredited programs in 1956. Degrees in Civil, Chemical, Electrical, Mechanical and Industrial engineering accounted for over 82% of those awarded. We are still considering the possibility of introducing an optional curriculum in aeronautical the next most popular field. As we grow there may be a place for metallurgical and engineering physics or engineering science. Architecture is also a curriculum sometimes found in schools of engineering of land-grant universities.

Buildings

Our first shortage in space as enrollment increases will be for drafting rooms. If we continue a shop program for engineering students, which seems most desirable at this time, additional machine shop, welding and possibly foundry facilities will be needed. The Engineering Shop and Drafting Room Building for which money is being requested in 1959 can furnish these.

Beyond this our problem will be to keep plans for additional classrooms and engineering laboratories ahead of future requirements. The proposed $1,500,000 Engineering Building in the 1961 Capital Outlay Budget appears properly scheduled.

Distinguished Lecturers

The University is in need of a series of distinguished lecturers. Nationally prominent people should be brought to the campus both for convocations and seminar discussions. Many of our students come from backgrounds lacking cultural advantages we all recognize as helpful. They are alert and eager to feel that their University is second to none. Our concert series has been a fine thing for the campus community. Now we need a distinguished lecturer series to balance the picture.

George A. Marston

December 2, 1957

APPENDIX

Fig.	1	Organization Chart
"	2	Personnel Data of Faculty
"	3	Recent Professional Publications and Patents of Staff
"	4	Summary of Academic Record of Engineering Students, June 1957
"	5	Academic Standards for the School of Engineering
"	6	Employment of Engineering Graduates, Class of 1957
"	7	Enrollment 1947 - 1957 by Classes
"	8	Bachelor and Masters Degrees 1949 - 1957
"	9	Plot of Enrollment, Graduates and Class Enrollments 1947 - 1957
"	10	Plot of Sophomore Elections of Majors 1948 - 1957
"	11	Academic Careers of Engineering Graduates of Classes of 1955 - 1956
"	12	Five year Questionnaire (Class of 1951)

University of Massachusetts
SCHOOL OF ENGINEERING

Fig.1

(Revised February 1, 1957)

40½ Professional Staff
15 Maintenance "
5 Clerical "

C. S. ROYS, HEAD
Electrical Engineering Dept.

Prof. J. W. Langford
Assist. Prof. W. W. Smith
Assist. Prof. F. H. Edwards
Assist. Prof. J. E. Laostadius
Assist. Prof. J. A. Fitzgerald
Assist. Prof. G. H. Lyttle
Assist. Prof. F. R. Longley (1/2)
Mr. E. M. Hadro
Mr. D. J. Beaubien (1/2)
Mr. S. H. Crowell (1/2)
Mr. G. E. Egan (1/2)

On leave of absence:
Assoc. Prof. J. W. Mohn

Mr. W. F. Cook
Mr. A. J. Ress
Mr. F. G. Duda

E. E. LINDSEY, HEAD
Chemical Engineering Dept.

Assoc. Prof. K. D. Cashin
Assist. Prof. H. C. Duus
Mr. I. L. Goodchild (1/2)

Mr. R. L. Glazier

G. A. MARSTON
Dean

Miss Brownell, Dean's Office
Mrs. Tudryn, Electrical Engineering and Dean's Office
Miss O'Hara, Mechanical Engineering
Mrs. Carson, Chemical Engineering and Civil Engineering
Mrs. Grady, Library and General

Mr. Stanley Rogers

Mr. C. W. Smith
Mr. F. H. Jones
Mr. J. Finn
Mr. A. Goyette

W. H. WEAVER, HEAD
Mechanical Engineering Dept.

Prof. M. E. Bates
Prof. J. D. Swenson
Prof. C. A. Keyser
Prof. J. H. Dittfach
Assoc. Prof. J. B. Longstaff
Assoc. Prof. D. Sobala
Assoc. Prof. G. P. Weidmann
Assist. Prof. E. D. Emerson
Assist. Prof. R. K. Patterson
Assist. Prof. R. W. Day
Assist. Prof. A. J. Costa
Assist. Prof. R. H. Harrington
Assist. Prof. W. Hopkins
Mr. J. H. Spencer

Mr. L. W. Rauch
Mr. A. T. Lozoski
Mr. F. T. Wojtkiewicz
Mr. J. T. Gurski
Mr. K. E. Williams

M. P. WHITE, HEAD
Civil Engineering Department

Prof. E. C. Osgood
Prof. K. N. Hendrickson
Assoc. Prof. J. S. Marcus
Assist. Prof. T. H. Feng
Assist. Prof. T. A. Grow
Assist. Prof. A. G. Sharp
Assist. Prof. W. W. Boyer
Assist. Prof. G. R. Higgins
Mr. D. C. Bartlett

Mr. W. P. Gurski

University of Massachusetts

PERSONNEL DATA

SCHOOL OF ENGINEERING

The information below may be of interest as indicating the wide educational background of our staff in the School of Engineering.

Schools from which Staff Graduated

American International College
City College of New York
Dartmouth College
Georgia Institute of Technology
Harvard University
New York University
North Carolina State College
Pennsylvania State College
Polytechnic Institute of Brooklyn
Psi-Yang University (China)
Rensselaer Polytechnic Institute
Stevens Institute of Technology
Tufts College (2)
University of British Columbia
University of Connecticut
University of Maine (2)
University of Massachusetts (3)
University of Michigan (3)
University of Minnesota
University of New Hampshire
University of Wisconsin
U.S. Naval Academy
Worcester Polytechnic Institute (5)
Yale University

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Additional Colleges or Universities with which our staff have been associated in an Instructional or Research capacity.

Antioch College
Illinois Institute of Technology
Lehigh University
Princeton University
Syracuse University
Trinity College (Hartford)
University of Tennessee
University of Virginia

8

Total Instructional Staff

Number	Department	Degrees
3	Chemical	7
9 1/2	Civil	21
8	Electrical	16
13	Mechanical	28
33 1/2	Total Professional Staff	72
1	On leave- Prof.	"
12	Technicians	
5	Clerical	
51 1/2	Total Staff	

Schools from which Advanced Degrees Received

California Institute of Technology (2)
Carnegie Institute of Technology
Columbia University (2)
Dartmouth College
Massachusetts Institute of Technology (2)
North Carolina State College
Northwestern University
Nova Scotia Technical College
Pennsylvania State College (3)
Polytechnic Institute of Brooklyn
Purdue University (2)
Rensselaer Polytechnic Institute (3)
Stanford University
University of Delaware
University of Iowa
University of Maine (2)
University of Massachusetts (3)
University of Michigan (3)
University of Minnesota
University of Wisconsin (2)
Virginia Polytechnic Institute
Worcester Polytechnic Institute (5)
Yale University (2)

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University of Massachusetts

SCHOOL OF ENGINEERING

RECENT PROFESSIONAL PUBLICATIONS AND PATENTS OF STAFF

Title	Author	Publisher or Periodical
Materials of Engineering	C. A. Keyser	Textbook published by Prentice Hall, Inc.
More Evaporation for Less Money	E. E. Lindsey Co-author	Chemical Engineering Progress, Feb. 1955 Vol. 52 No. 2
Preparation for a Career in Engineering	E. D. Emerson	New England Professional Engineer, July 1955
Mapping and Meteorology Sections of Southwestern Greenland Glaciological Expedition	K. N. Hendrickson and others	ADTIC Publication A-104a, May, 1955 **Air University**
Thermochemical Studies on Fluorocarbons	H. C. Duus	Industrial and Engineering Chemistry, July, 1955
Electric Waves	C. S. Roys	Encylopaedia Britannica, 1955
Technische Dynamik	M. P. White Translator	Translation from German, Vol IV, Blackie and Son, 1954
Comparison of Hardening Produced in a Yield Point Steel by Uniaxial Loading under Static and Under Dynamic Conditions	M. P. White Co-author	Journal of Applied Mechanics, 1954
Positional Reference Device	M. E. Bates	Patent No. 2,665,497 1954
Study of Proposed By-pass at New Bern, N. C.	W. W. Boyer	Reports of North Caroline State Highway and Public Works Commission, 1954
Study of Proposed By-pass at Hickory, N. C.	W. W. Boyer	
Study of Proposed By-pass at Henderson, N. C.	W. W. Boyer	
Evaporation	E. E. Lindsey	Chemical Engineering, April 1953
Conal'-A Tailor Made Aluminum Alloy of High Creep Strength and Conductivity	R. H. Harrington and others	Metal Progress, May 1953

over

... Activities of an ... Engineering Department	W. A. ...	Journal of Engineering Educa- tion, June, 195[illegible]
Building in the Atomic Age (General Discussion)	M. P. White	M.I.T. Conference June, 195[illegible]
... Guide for the Design ... Buildings (Exposed to ... Blast)	M. P. White Co-author	Federal Civil ... Administration TM-5-..., June, 195[illegible]
... Report, Project East River	M. P. White Contributor	Associated Univer- sities, Inc., ... N.Y., 1952
... Engineering Metallurgy	C. A. Keyser	Textbook publ... April, 1952, ... Hall, Inc
The Radiation Fields of Pulse- ... Dipole Antennas	C. S. Keys	Paper Presented at National Convention of Institute of Radio Engineers, March, 1952, ...
... Receivers	C. S. Keys	Encyclopedia ... 1952
The Development of a Method for Designing Matching Networks for ... Band Antennas	C. S. Keys	Technical Report No. D-2175 Boeing Airplane Co., Seattle, Washington, September, 195[illegible]
...tillation in a Wetted Wall Column	E. E. Lindsey and Others	Industrial and Engineering Chemistry, January, 1952

Fig. 4

MEMORANDUM

From: School of Engineering
To: Whom It May Interest
Subject: Summary of Academic Record of Engineering Students, June 1957

Date: July 26, 1957

The following statistics may be of general interest as indicating the academic accomplishments of our students. They do indicate that the cutting edges published in the catalog are not realistic (1.5 at end of freshman year, 1.7 at end of the sophomore year and 1.6 for graduation).

The cutting edges used (based on Educational Policies Council action) for the various classes are as follows:

Class of 1958 (Seniors)	Class of 1959 (Juniors)
June 1955 Cumulative 1.2 or Semester 1.2	June 1956 Cumulative 1.4 or Semester 1.4
June 1956 Cumulative 1.4 or Semester 1.6	June 1957 Cumulative 1.5 or Semester 1.6
June 1957 Cumulative 1.6 or Semester 1.6	Class of 1960 (Sophomores)
1.6 required for graduation	June 1957 Cumulative 1.4 or Semester 1.5

The following show the distribution of 2nd semester grade point averages as well as the cumulative averages at the end of the 2nd semester 1956-1957

Grade Point Average	Class of 1958 2nd Semester		Class of 1959 2nd Semester		Class of 1960 2nd Semester		Freshmen Class of 1961 2nd Semester
		Cumulative		Cumulative		Cumulative	
1.0 and below	11	1	16	1	17	5	1
1.1 - 1.2	5	2	10	0	13	11	1
1.3 - 1.5	18	16	25	17	29	32	3
1.6 - 1.8	22	31	35	43	46	52	5
	56	50	86	61	103	100	10
1.9 - 2.0	19	27	14	20	27	33	3
2.1 - 2.5	43	54	45	57	65	69	14
2.6 - 3.0	45	49	46	32	40	39	13
3.1 - 3.5	32	20	25	15	17	10	3
3.6 - 4.0	6	4	7	5	7	8	2
	152	154	133	153	156	159	35
Total in Class	208		219		259		45
Failed out of Units.	7		19		17		1
Percentage below 1.9	26.9 %		19.3%		39.8%		22.2%
Percentage below 1.9 second semester 1955-56	31.0%		36.0%		34.2%		42.3%

A copy of the complete operation of the 1.9 grade point average for the 2nd semester 1956-57 is available for the confidential use of any of our faculty members if you want it.

George A. Hirston

[illegible] Activities of an [illegible] Engineering Department	G. A. Warston	Journal of Engineering [illegible] tion, June, [illegible]
[illegible] in the Atomic Age ([illegible] Discussion)	M. P. White	M.I.T. Conference June, 1952
[illegible] Guide for the Design [illegible] Buildings (Exposed to [illegible] Blast)	M. P. White Co-author	Federal Civil [illegible] Administration [illegible], June, [illegible]
[illegible] Report, Project East River	M. P. White Contributor	Associated Universities, Inc., [illegible] N.Y., 1952
[illegible] Engineering Metallurgy	G. A. Keyser	Textbook [illegible] April, 1952, [illegible] Hall, Inc
[illegible] Radiation Fields of Pulse-[illegible] Dipole Antennas	C. S. Roys	Paper Presented [illegible] National Convention of Institute of Radio Engineers, March, 1952, [illegible]
[illegible] Receivers	C. S. Roys	Encylopaedia [illegible] 1952
[illegible] Development of a Method [illegible] Designing Matching Networks for [illegible] Band Antennas	C. S. Roys	Technical Report No. D-12[illegible]5 Boeing Airplane Co., [illegible] Washington, September, 1952
[illegible] in a Wetted Wall Column	E. E. Lindsey and Others	Industrial and Engineering Chemistry January, 1952

Fig. 4

M E M O R A N D U M

From: School of Engineering
To: Whom It May Interest
Subject: Summary of Academic Record of Engineering Students, June 1957

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Class of 1958 (Seniors)
June 1955 Cumulative 1.2 or Semester 1.2
June 1956 Cumulative 1.4 or Semester 1.6
June 1957 Cumulative 1.6 or Semester 1.6
1.6 required for graduation

Class of 1959 (Juniors)
June 1956 Cumulative 1.4 or Semester 1.4
June 1957 Cumulative 1.5 or Semester 1.6

Class of 1960 (Sophomores)
June 1957 Cumulative 1.4 or Semester 1.5

The following show the distribution of 2nd semester grade point averages as well as the cumulative averages at the end of the 2nd semester 1956-1957

Grade Point Average	Class of 1958 2nd Semester	Cumulative	Class of 1959 2nd Semester	Cumulative	Class of 1960 2nd Semester	Cumulative	Prefreshmen Class of 1961 2nd Semester
1.0 and below	11	1	16	1	17	5	1
1.0 - 1.2	5	2	10	0	13	11	1
1.3 - 1.5	18	16	15	17	28	32	3
1.6 - 1.8	22	31	21	43	46	52	5
	56	50	86	61	103	100	10
1.9 - 2.0	19	27	14	29	27	33	6
2.1 - 2.5	43	34	45	37	65	69	14
2.6 - 3.0	45	49	46	52	40	39	13
3.1 - 3.5	32	20	21	15	17	10	3
3.6 - 4.0	8	4	7	5	8	8	2
	152	154	133	158	156	199	35
Total in Class	208		219		259		45
Failed out of Univ.	7		19		17		1
Percentage below 1.9	26.9 %		39.3%		39.8%		22.2%
Percentage below 1.9 second semester 1955-56	31.0%		36.0%		34.8%		42.3%

A copy of the complete operation of the 1.9 grade point average for the 2nd semester 1956-57 is available for the confidential use of any of our faculty members if you want it.

George A. Marston

Fig. 5

M E M O R A N D U M

From: School of Engineering
To: Whom It May Interest
Date: April 4, 1957
Subject: Academic Standards for the School of Engineering

The School of Engineering of the University operated under the so-called "Seventy Percent Rule" from February 1, 1949 to June 1954. Effective the first of the 1954-1955 school year the University changed to the letter grade system. This made certain adjustments necessary. Therefore, on October 26, 1954 the faculty of the School of Engineering voted the following academic standards which will apply to all engineering students beyond the first semester of their freshman year and which will be effective immediately:

1. A student must make a 1.90 grade point average in order to continue with a regular schedule the following semester. If his average is below 1.90, he must take a reduced load.
2. A student may continue in the School of Engineering in accordance with University regulations irrespective of his grade point average.
3. A student must have a grade point average of 3.00 or better the previous semester to register for more than the normal academic load.

The following summary of the Quality Point Grading System regulations apply to all students in the University. Quality points are earned as follows:

A = 4 quality points C = 2 quality points
B = 3 quality points D = 1 quality point
F or Inc = 0 quality points

FRESHMAN YEAR

A student will be dismissed from the University as deficient in scholarship —

A. If at the end of his first semester he has failed three academic courses with an aggregate of eight or more semester hours and has not earned a grade of C or better in each of his other academic subjects.
B. If at the end of the second semester he has earned fewer than 1.4 times as many quality points as the total number of credits for which he has registered.
C. He will not be dismissed if his second semester average is 1.5 or better. (NOTE: This applies to the Class of 1960.)

SOPHOMORE, JUNIOR AND SENIOR YEARS

A student will be dismissed from the University as deficient in scholarship —

A. If at the end of his fourth semester he has earned fewer than 1.5 times as many quality points as the total number of credits for which he has been registered. (NOTE: This applies to the class of 1959.)
Any student subject to dismissal as noted above will not be dismissed if his work of the current semester is 1.6 or better.
B. If at the end of his sixth or any following semester he has earned fewer than 1.6 times as many quality points as the total number of credits for which he has been registered. (NOTE: This applied to the class of 1958.) Any student subject to dismissal as noted above will not be dismissed if his work of the current semester is 1.6 or better.
C. The quality point average required for graduation for the class of 1958 has been established as 1.6.

George A. Marston

Fig. 6

M E M O R A N D U M

UNIVERSITY OF MASSACHUSETTS

From: School of Engineering Date: August 15, 1957
To: WHOM IT MAY INTEREST
Subject: Employment of Engineering Graduates, Class of 1957

This year through the efforts of Mr. Robert J. Morrissey, our Placement Officer, and our own staff, the 105 graduates have had an unusual opportunity to select their particular position from many.

The following companies or organizations are employing our 1957 engineering graduates:

Air Products, Inc., Allentown, Pennsylvania
Airborne Instruments Laboratory, Mineola, New York
Alco Products, Inc., Dunkirk, New York
Allis Chalmers Manufacturing Company, Milwaukee, Wisconsin
Baltimore and Ohio Railroad, Cincinnati, Ohio
Bell Aircraft Company, Niagara Falls, New York
Boeing Airplane Company, Seattle, Washington
Boston Edison Company, Boston, Massachusetts
Bureau of Ships, Washington, D. C.
Chapman Valve Manufacturing Company, Indian Orchard, Massachusetts
Columbia Southern Chemical Corporation, Barberton, Ohio
Combustion Engineering, Windsor, Connecticut
Douglas Aircraft, El Segunda, California
Dow Chemical Company, Midland, Michigan
Duffill Association, Boston, Massachusetts
Dunn Engineering Associates, Cambridge, Massachusetts
Factory Insurance Association, Hartford, Connecticut
Ford Motor Company, Detroit, Michigan
Foxboro Company, Foxboro, Massachusetts
General Dynamics Corporation, Groton, Connecticut
General Electric Company, Schenectady, New York
General Electronics Laboratories, Cambridge, Massachusetts
General Rotary Company, Bristol, Connecticut
Glenn L. Martin Company, Baltimore, Maryland
Hamilton Standard, Windsor Locks, Connecticut
Hubbs C. M. Marine Sales and Service, Cambridge, Massachusetts
Hughes Aircraft Company, Culver City, California
International Business Machines Corporation, Kingston, New York
Jackson and Moreland, Engineers, Boston, Massachusetts
Marquardt Aircraft Company, Van Nuys, California
Massachusetts Institute of Technology, Cambridge, Massachusetts
Metcalf and Eddy, Engineers, Boston, Massachusetts
Monsanto Chemical Company, Springfield, Massachusetts
National Carbon Company, Niagara Falls, New York
Naval Ordnance Laboratory, Silver Springs, Maryland
New England Electric System, Malden, Massachusetts
New Jersey Bell Telephone Company, Newark, New Jersey
North American Aviation, Columbus, Ohio
Northeastern University, Boston, Massachusetts
Northrop Aircraft Company, Hawthorne, California

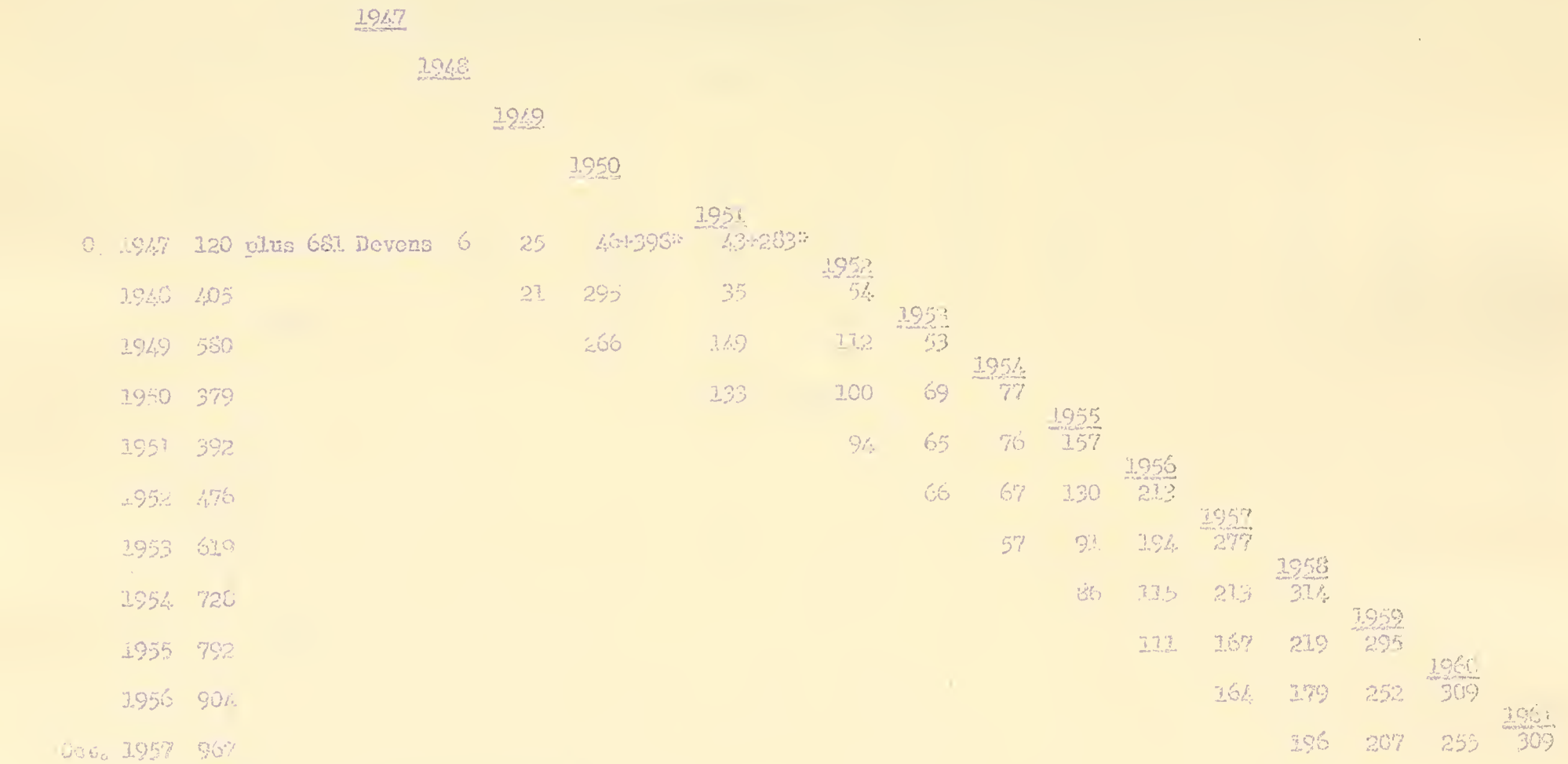
(continued on back)

Pratt & Whitney [illegible], [illegible], Connecticut
Radio Corporation of [illegible], [illegible], Massachusetts
Raytheon Manufacturing Company, [illegible], Massachusetts
Rensselaer Polytechnic Institute, Troy, New York
Rocketdyne, Canoga Park, California
Scintilla Division, Sidney, New York
Simonds Saw & Steel Company, Fitchburg, Massachusetts
Singer Manufacturing Company, Bridgeport, Connecticut
Stone and Webster Company, Boston, Massachusetts
Stromberg Carlson Company, Rochester, New York
Sylvania Electric Products, Waltham, Massachusetts
Texas Company, Beacon, New York
Underwater Sound Laboratory, New London, Connecticut
United States Air Force
United States Army
United States Corps of Engineers, Boston, Massachusetts
United States Patent Office
University of Illinois, Urbana, Illinois
University of Massachusetts, Amherst, Massachusetts
University of Tennessee, Knoxville, Tennessee
Western Electric Company, Lawrence, Massachusetts
Western Massachusetts Electric Company, Springfield, Massachusetts
Westinghouse Electric Corporation, Springfield, Massachusetts
City of White Plains, New York
Worthington Corporation, Holyoke, Massachusetts
Zenith Radio Corporation, Chicago, Illinois

George A. Marston
Dean of Engineering

University of Massachusetts
School of Engineering

ENROLLMENT



*Devens Enrollment

Fig. 7

University of Massachusetts
School of Engineering

BACHELOR DEGREES

The first designated engineering degrees, i.e., B.S.C.E., etc., were awarded in June 1949. Since then the following degrees have been awarded by the School of Engineering:

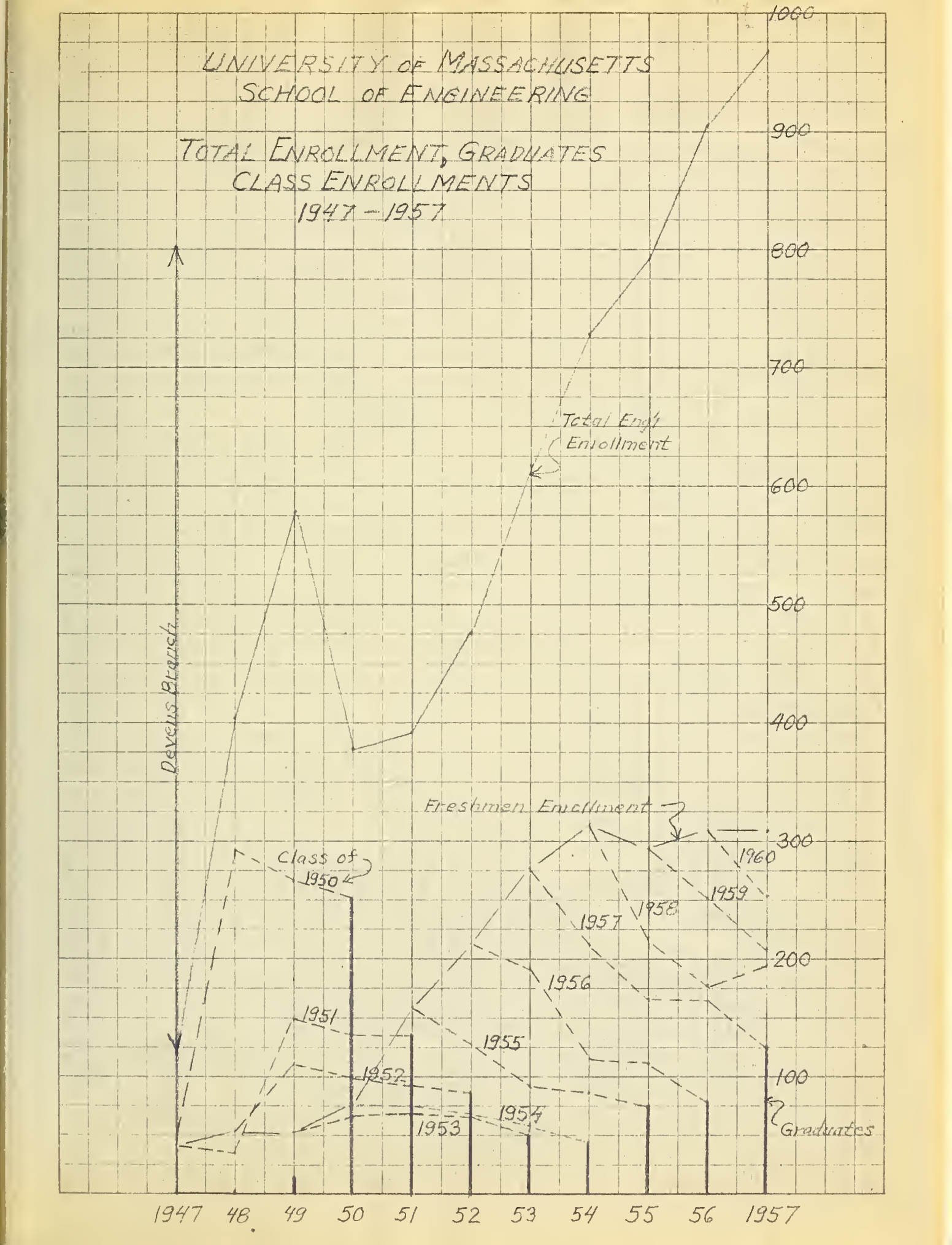
	1948-1949	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
Ag.E.	1	3	5	3	2	1	1	-	-
Ch.E.	0	8	12	3	2	8	9	9	18
C.E.	3	53	29	22	15	9	15	18	30
E.E.	1	66	38	24	16	8	18	26	39
M.E.(including I.E.)	10	121	50	37	15	19	32	27	39
	15	251	134	89	50	45	75	80	126
TOTAL	15	266	400	489	539	584	659	739	865

MASTER DEGREES

Ch.E.	-	-	-	-	-	-	-	-	-
C.E.	-	-	-	-	2	1	1	-	4
E.E.	-	-	-	-	-	1	2	-	-
M.E.	-	-	-	-	-	-	1	-	1
	-	-	-	-	2	2	4	-	5
TOTAL					2	4	8	-	13

11/25/57

Fig. 8


UNIVERSITY OF MASSACHUSETTS
SCHOOL OF ENGINEERING
TOTAL ENROLLMENT, GRADUATES
CLASS ENROLLMENTS
1947 – 1957
Total Engr Enrollment
Freshmen Enrollment
Class of 1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
Graduates
Devens Branch
1000
900
800
700
600
500
400
300
200
100
1947
48
49
50
51
52
53
54
55
56
1957

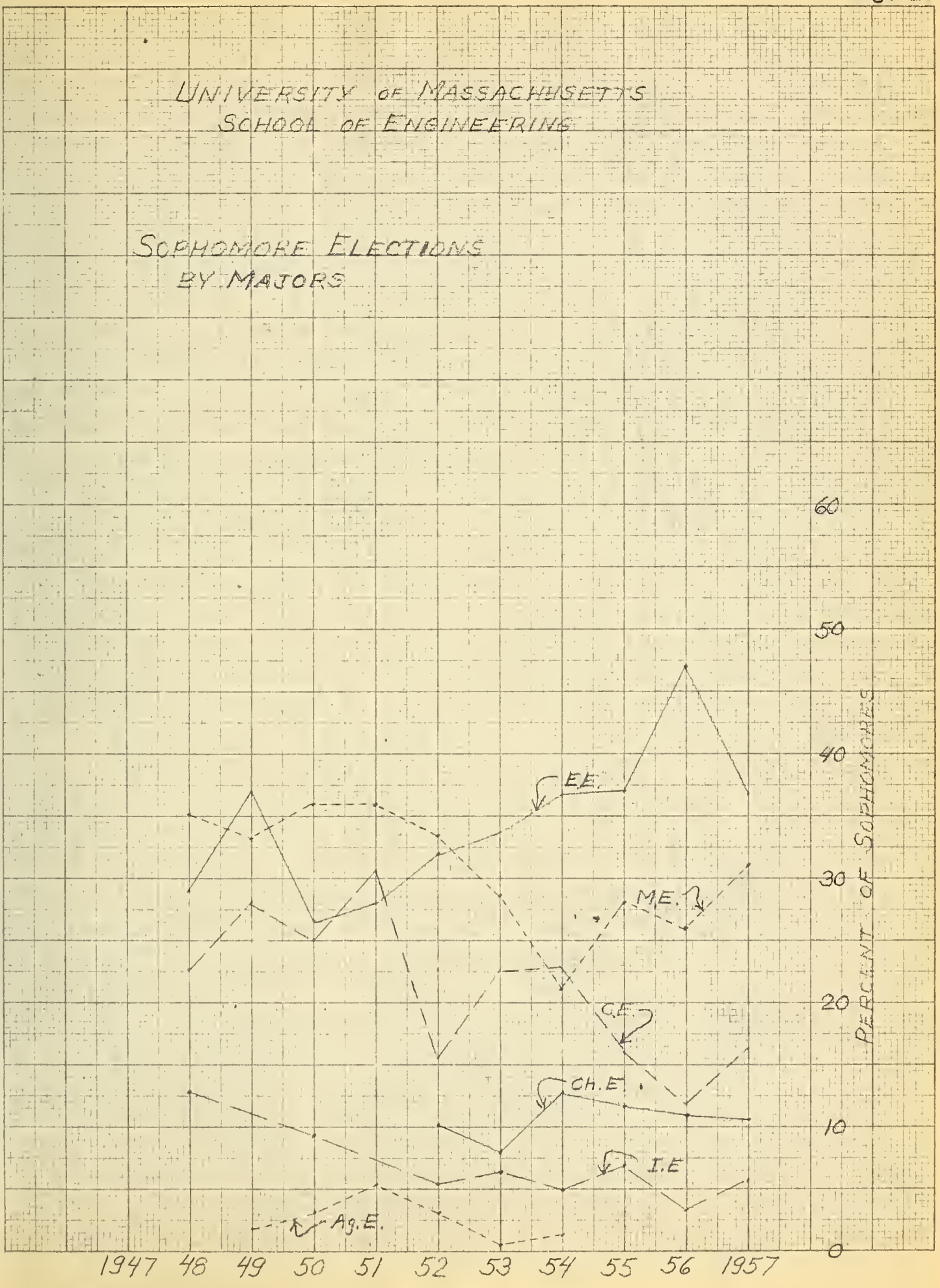

UNIVERSITY OF MASSACHUSETTS
SCHOOL OF ENGINEERING
SOPHOMORE ELECTIONS
BY MAJORS
60
50
40
30
20
10
0
PERCENT OF SOPHOMORES
E.E.
M.E.
C.E.
CH.E.
I.E.
Ag.E.
1947 48 49 50 51 52 53 54 55 56 1957

Fig. 11

M E M O R A N D U M

From School of Engineering — Date: January 7, 1957
To Whom It May Interest
Subject: Academic Careers of Engineering Graduates of Classes of 1955 and 1956

A recent study of the University academic careers of the 149 Engineering graduates of the Classes of 1955 and 1956 indicate the following facts:

87 completed their requirements in 4 years or less (1) or	58.3%
20 more completed their requirements in 4 years plus one summer or ..	13.4%
19 more required an extra 2 or 3 summers or	8.7%
	80.4%
11 required an extra semester or 4½ years	7.4%
4 more required one or 2 summers plus 4½ years	2.7%
11 required 5 years	7.4%
3 required more than 5 years	2.1%
	100.0%

NOTE: Required "Summer Shop" was not included.

The 149 graduates represent 40.2 percent of the freshmen who entered with these two classes, and include 9 transfer students who entered the University with advanced credit. However, it should be noted that the Class of 1954 started with 77 engineers, the Class of 1955 with 157, and the Class of 1956 with 213. Therefore, had the Class of 1954 started with a larger number, such as 157 for example, then the number of graduates in 1955 would have undoubtedly been larger.

George A. Marston

M E M O R A N D U M

From: School of Engineering. Date: April 23, 1957.
To: Whom It May Interest.
Subject: Five-year Questionnaire (Class of 1951).

This past December we sent a questionnaire prepared by Mr. Robert J. Morrissey, placement officer, with the Annual Newsletter to the 114 members of the Class of 1951 (five-year class), with engineering degrees. Forty-six replies were received, and the following results may be of interest.

A. Monthly Salary: Average $610. Range $350 (Army) to $1032.83.
Starting salary averaged about $300 per month for this class.

B. Courses found most valuable:

Mathematics, Technical Writing, Economics, Business Law, English Composition, Psychology

---

All Engineering, Unit Operations, Organic Chemistry, Machine Design, Strength, Kinematics, Surveying, Highways, Structural Design, Metallurgy, Materials, Soil Mechanics, Drafting, Fluid Mechanics, Machine Design, A.C. Machinery, Vibrations, Thermodynamics, Statics, Transient Analysis, Communications

C. Courses lacking:

Practical Design, Management, Financial, Nuclear Engineering, Automation, Production Methods, Welding, Aerodynamics, Statistical, Servomechanism, Social Studies, Architectural Design, Equipment Design, Plant Design

D. Additional Comments:

Needs knowledge of history, government, foreign affairs.
A general course in corrosion needed.
Recommend courses in electronics for all engineers.
All engineers need a course in human relations.
Basic knowledge of fundamentals must be thoroughly understood.
Ability to solve unusual problems held in highest regard by industry.
Keep engineering courses broad--do not drop liberal arts courses.
Summer employment in industry very valuable.
A Civil major should be able to choose electrical or mechanical courses.
Teachers with industrial experience helpful.
Experience gained first few years most important.
A company does not hire a college graduate for what he knows but for his ability to learn.
Have seen few with as thorough a background as from University of Mass.

George A. Marston

SCHOOL OF HOME ECONOMICS

Memorandum

From: Helen S. Mitchell Date: November 27-1957

To: James W. Burke

Subject: Annual Report

The demand for dietitians and home economics teachers and extension workers is increasing yearly. Early marriages among our graduates and a decrease in enrollment have given rise to an acute shortage of professionally trained women. More public awareness of the variety of opportunities and good remuneration in Home Economics is needed, i.e. more publicity such as has been given to the need for nurses and elementary teachers.

The curriculum in the School of Home Economics at the University of Massachusetts has been revised in line with student interest and the general belief in a liberal education along with specialization. Students interested in child development or merchandising take a minimum of work in food and nutrition while a dietetics major takes more scientific courses and a minimum in clothing, art and related areas. All students are urged to elect courses in the School of Arts and Science each year.

Our Scholarship aid for undergraduates should offer encouragement to future students who may hesitate to undertake a college program because of limited finances. For the school year 1957-58, two seniors, three juniors, four sophomores, and four freshmen, received tuition scholarships from sources designated for home economics students only. In addition, five students held Commonwealth Scholarships of $250 per year for four years. The Edna Skinner Scholarship which is partially contributed to by alumnae provided enough to assist two students. Interest from the Helen Knowlton Scholarship fund will be available for the first time in the fall of 1958 and should be enough to help two or three students.

Expansion of Graduate Offerings is planned in line with demand to meet the needs of our own resident students, teachers from the locality, and students in other departments. To accommodate those who are employed during the day, one or two courses each semester will be offered late afternoon and evening. The School of Home Economics will offer two graduate courses during the first five weeks' summer session 1958.

The Graduate enrollment of 11 in Home Economics this year includes four students from other countries: Inger Bakko, from Norway, is preparing to teach experimental foods and chemistry at the Teachers College in Stabekk, Norway. Icilda Phillips, from Jamaica who is serving as teaching assistant, hopes to return to Jamaica to work in the school lunch program. Ruriko Ikerami, a major in biochemistry from Kyoto, Japan, is our departmental fellow in Home Economics Research. Wafika Hady from Egypt is here on an F.A.O. fellowship studying general Home Economics with emphasis on Extension methods. She plans to return to work among village women in her native country under sponsorship of F.A.O. It is anticipated that Hokkaido University will send a graduate home economist to Massachusetts in 1958.

Respectfully submitted

Helen S. Mitchell

Helen S. Mitchell, Dean
School of Home Economics

HSM/(illegible)

UNIVERSITY OF MASSACHUSETTS
School of Nursing

ANNUAL REPORT OF THE SCHOOL OF NURSING
October 1, 1956 - October 1, 1957

UNIVERSITY OF MASSACHUSETTS

Faculty of the School of Nursing
1956 - 1957

Full Time Faculty

Mary A. Maher, R.N., B.S., M.A.; Dean, School of Nursing
Elizabeth A. Clarke, B.S., R.N., M.A., M.N.; Instructor in Nursing (appointed September 1957)
Gellestrina T. DiMaggio, A.B., R.N., M.N., M.A.; Assistant Professor of Pediatric Nursing
Mary E. Gilmore, R.N., B.S., M.S.N.; Associate Professor of Nursing
Winifred A. Kelly, R.N., B.S., M.S.; Assistant Professor of Psychiatric Nursing
Mary E. Macdonald, A.B., R.N., M.A.; Associate Professor of Nursing Education

Part Time Faculty

Mrs. Bess Ellison, R.N., M.S.; Instructor in Tuberculosis Nursing
Miss Ann LaDuc, R.N.; Instructor in Operating Room Nursing
Miss Marion Ostrander, R.N., M.A.; Instructor in Maternity Nursing
Miss Theresa Petrone, R.N., B.S.; Instructor in Nursing
Miss Sheila Spector, B.S.; Instructor in Clinical Nutrition

Clinical Associates of the Faculty of the School of Nursing

Margaret J. Busche, R.N., B.S.; Clinical Associate in Nursing
Margaret A. Hogan, R.N., M.A.; Clinical Associate in Maternity Nursing
Bertha Eames Hutchins, R.N., B.S.; Clinical Associate in Public Health Nursing
Hazel Keith, R.N., M.S.; Clinical Associate in Nursing
Jean A. MacNally, R.N., B.S.; Clinical Associate in Public Health Nursing
Katherine F. Mullane, R.N., B.S.; Clinical Associate in Tuberculosis Nursing
Margaret C. Tibbetts, R.N., B.S.; Clinical Associate in Psychiatric Nursing

MAM/adm
10/57

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ANNUAL REPORT OF THE SCHOOL OF NURSING
October 1, 1956 - October 1, 1957

Prepared by Faculty of the School of Nursing

PART ONE

Admissions, Withdrawals, Transfers
Basic Collegiate Program

A. Current Enrollment: Total - 57

(Graduating) Class of 1958 - 4
Class of 1959 - 4
Class of 1960 - 13
Class of 1961 - 14
Class of 1962 - 22
57 students

B. Withdrawals from School of Nursing: Total - 15

Class of 1958 - 0
Class of 1959 - 0
Class of 1960 - 3
Class of 1961 - 12
Class of 1962 - 0

C. List of Withdrawals by Class:

Name	Date Admitted	Date Withdrew	Reason
Class of 1960:			
1. Crane, Patricia	9/55	8/57	Transfer to College of Liberal Arts close to home
2. Dangelmayer, Virginia	9/55	2/57	Withdrew - Scholastic failure
3. Swanbeck, Mae	9/55	2/57	Transfer to School of Home Economics
Class of 1961:			
1. Brown, Sally	9/56	6/57	To CLA - course failure
2. Carlson, Janet	9/56	6/57	To CLA
3. Clements, Virginia	9/56	2/57	Withdrew - Scholastic failure
4. Henrickson, Leone	9/56	2/57	To CLA - course failures
5. Klock, Bernadette	9/56	2/57	To CLA - course failures
6. Marcy, Marion	9/56	2/57	Withdrew - Scholastic failure
7. Negus, Betty	9/56	6/57	To CLA

Name	Date Admitted	Date Withdrew	Reason
8. Robinson, Lynne	9/56	2/57	To CLA - course failure
9. Rosa, Paula	9/56	6/57	To CLA
10. Stone, Barbara	9/56	2/57	Withdrew from University
11. Wheaton, Nancy	9/56	6/57	To Diploma Program
12. Whitney, Susan	9/56	6/57	To CLA

D. Transfers to School of Nursing:

Class of 1961	Admitted to Univ.	Admitted to S. of N.	Comment
Sherwood, Carol	9/55 (completed one semester)	2/57	Return Student

E. Report on September 1957 Admissions:

Number of candidates tested	49
Number of candidates accepted	33
Number of candidates registered	31
Number of candidates rejected	16
Number of candidates withdrawing after registration	9
Number of Freshmen enrolled	22

F. Comparison of Admission Statistics for 1955-1956-1957:

Sept.	1955		1956		1957	
Applicants tested	34		58		49	
Applicants accepted	29		48		33	
on basis of certification		15		38		26
on basis of college boards		14		10		7
Applicants rejected	5		10		16	
Freshmen enrolled	23		25		22	

G. Percent of Students of Nursing in Relation to Region of State in Which They Reside:

Sept.	1955	1956	1957
Western Massachusetts	40%	36%	41%
Central Massachusetts	10%	14%	18%
Eastern Massachusetts	49%	49%	41%

H. Report of Withdrawal Statistics:

	Class Admitted in September			
	1954 *	1954	1955	1956
1. Number of students enrolled	5	13	23	25

	Class Admitted in September 1954 *	1954	1955	1956
Number of students enrolled by transfer	0	2	1	1
TOTAL	5	15	24	26
2. Number of students withdrawing				
... after 6 months	1	3	3	6
... after 1 year	0	4	5	6
... after 1½ years	0	3	2	-
... after 2 years	0	1	1	-
... after 3 years	0	0	-	-
... after 4 years	0	-	-	-
TOTAL	1	11	11	12
3. Number of students transferring				
... other schools and departments of University	1	5	3	8
... other programs of nursing	0	5	5	1
... other college programs (Not nursing)	0	0	1	0
... plans unknown	0	1	2	3
4. Number of student withdrawing from School of Nursing				
... because of failure to meet quality point average	0	1	5	2
... because of failure in required course/courses	0	0	2	4

* ADMITTED AS SOPHOMORE CLASS

5. Withdrawal Percents:				
after 6 months	20%	20%	12.5%	23%
after 1 year	20%	46.6%	33.3%	46.1%
after 1½ years	20%	66.6%	41.6%	-
after 2 years	20%	73.3%	45.8%	-
after 3 years	20%	73.3%	-	-
after 4 years	20%	-	-	-
TOTAL (to date)	20%	73.3%	45.8%	46.1%
6. Percent of Withdrawal due to low scholastic achievement:	0%	9%	63%	50%
7. Percent of withdrawees transferring to other University Schools and Departments:	100%	45%	27%	66%
8. Percent of withdrawees transferring to other programs of nursing	0%	45%	45%	8%

I. Report on Student Progress (as of 6/57):

* ADMITTED AS SOPHOMORE CLASS

Quality Point Average (Cumulative)	Class Admitted in September 1954	1955	1956
3.5 - 4.0	--	--	--
3.0 - 3.4	50%	--	21.3%
2.5 - 2.9	25%	15%	21.3%
2.0 - 2.4	25%	62%	36%
1.5 - 1.9	--	23%	21.3%
1.0 - 1.4	--	--	--
Number of Students	4	13	14

Quality Point Average: University Class Average (1956**)

Freshman: 1.9
Sophomore: 2.0
Junior: 2.2
Senior: 2.6
All University: 2.2

** 1957 figures not yet available

J. List of Students Enrolled:

Name	Address	High School
Graduating Class (1958)		
1. ACGERUP, Lois C.	59 Upland Street, Springfield, Mass.	Technical High School, Springfield, Mass.
2. BROWN, Carol R.(Mrs.)	Harkness Road, Pelham, Massachusetts	Amherst High School, Amherst, Mass.
3. CAPERS, Joan A.	4 Knollwood Drive, Shrewsbury, Mass.	Shrewsbury High School, Shrewsbury, Mass.
4. PICKLES, Audrey J.	169 Oakland Avenue, Methuen, Mass.	Edw.F.Searles High Sch., Methuen, Mass.
Senior Class (1959)		
1. BLAISDELL, Ann P.(Mrs.)	University Farmhouse, Amherst, Mass.	Amherst High School, Amherst, Mass.
2. BROWN, Elizabeth A.	32 Marywood Street, Uxbridge, Mass.	Uxbridge High School, Uxbridge, Mass.
3. KIESLING, Doris A.	111 Edgewood Avenue, Methuen, Mass.	Methuen High School, Methuen, Mass.
4. SOWYRDA, Cynthia	68 West Grove Street, Middleboro, Mass.	Memorial High School, Middleboro, Mass.
Junior Class (1960)		
1. ALLYN, Ann E.	Main Street, Montgomery, Massachusetts	Westfield High School, Westfield, Mass.
2. BARNES, Mary E.	RFD Box 297, Northfield, Mass.	Northfield Sch.for Girls, Northfield, Mass.

Name	Address	High School
3. BLISS, Jean F.(Mrs.)	Taylor Hill Road, Montague, Mass.	Dighten High School, No. Dighten, Mass.
4. DICKINSON, Lois G.	42 Harris Street, North Amherst, Mass.	Amherst High School, Amherst, Mass.
5. DUPUIS, Joyce O.V.	South Washington St., Belchertown, Mass.	Belchertown High School, Belchertown, Mass.
6. GENTILE, Gail C.	52 Malvern Road, Brockton, Mass.	Brockton High School, Brockton, Mass.
7. HALL, Lucy	Dodge Road, Rowley, Massachusetts	Newburyport High School, Newburyport, Mass.
8. LEPP, Martha H.	84 Melbourne Road, Pittsfield, Mass.	Pittsfield High School, Pittsfield, Mass.
9. MAND, Merike V.	39 Northampton Road, Amherst, Mass.	Amherst High School, Amherst, Mass.
10. POMEROY, Gaye L.	Russellville Road, Westfield, Mass.	Westfield High School, Westfield, Mass.
11. SARGENT, Anne P.	200 Lowell Street, Peabody, Mass.	Peabody High School, Peabody, Mass.
12. SARGENT, Christine	200 Lowell Street, Peabody, Mass.	Peabody High School, Peabody, Mass.
13. SPIEGEL, Karin C.	200 Arcade Avenue, Seekonk, Mass.	Providence High School, Providence, Rhode Island

Sophomore Class (1961)

1. BIENIEK, Lorraine J.	Fisk Road, Adams, Massachusetts	Adams Memorial High School, Adams, Mass.
2. BURKE, Elizabeth H.	34 Ryan Road, Florence, Massachusetts	Northampton High School, Northampton, Mass.
3. BUSHA, Elsie E.	73 Seventh Street, Turners Falls, Mass.	Turners Falls High Sch., Turners Falls, Mass.
4. CLARK, Eleanor L.	5 Goddard Avenue, Turners Falls, Mass.	Turners Falls High Sch., Turners Falls, Mass.
5. FLETCHER, Margot H.	31 Hancock Park, Everett, Mass.	Everett Senior High Sch. Everett, Mass.
6. HYDE, Carolyn B.	186 Lebanon Avenue, Pittsfield, Mass.	Pittsfield High School, Pittsfield, Mass.
7. KARL, Elizabeth I.	Maple Parkway, Fitchburg, Mass.	Lunenburg High School, Lunenburg, Mass.
8. LEWIS, Anita C.	Ayer Road, Harvard, Massachusetts	Bromfield High School, Harvard, Mass.
9. MacQUARRIE, Gail E.	15 Congreve Street, Roslindale, Mass.	Roslindale High School, Roslindale, Mass.
10. O'CONNOR, Catherine	19 Florence Avenue, Holyoke, Mass.	Holyoke High School, Holyoke, Mass.
11. PEPE, Barbara A.	414 North Street, Feeding Hills, Mass.	Agawam High School, Agawam, Mass.
12. SHERWOOD, Carol B.	1512 Andover Street, Tewksbury, Mass.	Tewksbury High School, Tewksbury, Mass.
13. THOMAS, Sara W.	Plain Street, Norton, Massachusetts	Norton High School, Norton, Mass.
14. WALLACE, Anne G.	619 Miller Street, RFD North Wilbraham, Mass.	West Sprignfield High Sch. & Ludlow High School; W. Springfield & Ludlow, Ms.

Name	Address	High School
Freshman Class (1962)		
1. AUTIELLO, Geraldine R.	90 Bunkerhill Street, Lawrence, Mass.	Lawrence High School, Lawrence, Mass.
2. CASHMAN, Sandra M.	17 High Street, Natick, Mass.	Natick High School, Natick, Mass.
3. CLARK, Judith B.	28 Reed Street, Agawam, Mass.	Agawam High School, Agawam, Mass.
4. DUBIEL, Marlene J.	991 Carew Street, Springfield, Mass.	Classical High School, Springfield, Mass.
5. FEDORYSHYN, Dorothy	49 Wilson Street, Pittsfield, Mass.	Pittsfield High School, Pittsfield, Mass.
6. FETZER, Phyllis Ann	52 Bucklin Street, No. Attleboro, Mass.	North Attleboro High Sch., North Attleboro, Mass.
7. FREEMAN, Claire E.	89 South Main Street, Randolph, Mass.	Randolph High School, Randolph, Mass.
8. GAMELE, Norma C.	15 June Street, Oxford, Massachusetts	Oxford High School, Oxford, Mass.
9. GINIPERO, Beverly J.	20 Larch Street, Pittsfield, Mass.	Pittsfield High School, Pittsfield, Mass.
10. HALL, Prudence E.	Hollow Road, Brimfield, Massachusetts	Tanasqua Regional High School, Brimfield, Mass.
11. LONGDEN, Elizabeth M.	305 Mill Street, New Bedford, Mass.	New Bedford High School, New Bedford, Mass.
12. MacNEIL, Jane	62 Beal Road, Waltham 54, Massachusetts	Waltham High School, Waltham, Mass.
13. MALINOWSKI, Patricia M.	68 Huntington Road, Hadley, Mass.	Hopkins Academy, Hadley, Massachusetts
14. McCONNELL, Patricia Ann	Berlin Road, Williamstown, Mass.	Williamstown High School, Williamstown, Mass.
15. NOROIAN, Nancy A.	5 Brook Street, Whitinsville, Mass.	Northbridge High School, Whitinsville, Mass.
16. NORTON, Elaine P.	50 Warren Avenue, Woburn, Mass.	Woburn High School, Woburn, Mass.
17. OLSEN, Carole J.	40 Pittsfield Avenue, Pittsfield, Mass.	Pittsfield High School, Pittsfield, Mass.
18. RICE, Dorothy E.	Berlin Road, Williamstown, Mass.	Williamstown High School, Williamstown, Mass.
19. RODZWELL, Nancy E.	Pelham Road, Amherst, Massachusetts	Amherst Regional High School, Amherst, Mass.
20. SHARPE, Mary G.	7 Summer Street, Shrewsbury, Mass.	Major Beal High School, Shrewsbury, Mass.
21. SOUTH, Sally M.	29 Homestead Avenue, Weymouth, Mass.	Weymouth High School, Weymouth, Mass.
22. WALL, Deborah C.	5 Sedgwick Park, Woburn, Mass.	Woburn Senior High School, Woburn, Mass.

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PART TWO

Report of Standing and Other Committees of the Faculty *

I. Curriculum Committee

Nineteen regular and two special meetings of this committee were held during past year in order to carry out the functions prescribed in by-laws of the Faculty Organization of the School of Nursing. Major areas of committee investigation and study are summarized below, some of which are described in more detail in PART THREE of this report.

A. Hearing and acting on reports from various university, school of nursing, interagency and other committees.

B. Selection of candidates for September, 1957 class.

C. Periodic review of student progress.

D. Consideration of interim and final course evaluation reports for:
- Nursing 26 - Orientation to Nursing
- Nursing 52A - Nursing of Children I
- Nursing 57 - Maternity Nursing
- Nursing 52B - Nursing of Children II

E. Development, revision or analysis of course outlines for:
- Zoology 37-38 - Human Anatomy and Physiology
- Nursing 54 - Psychiatric Nursing
- Nursing 58 - Public Health Nursing
- Nursing 26 - Orientation to Nursing
- Nursing 56 - Tuberculosis Nursing

F. Consideration of course content for:
- Nursing 1, 2, 25 - Introduction to Nursing
- Nursing 65-70 - Senior Internship
- Nursing 60C - Medical and Surgical Nursing

G. Planning for the integration of psychiatric nursing concepts throughout the basic curriculum.

H. Preparation of materials for:
- Subcommittee of New England Regional Conference on Public Health Nursing Education related to Student Evaluation in Public Health Nursing.
- Visit of Training Specialist - Mental Health Grant.
- NLN Curriculum Conference relative to Developing a Functional Curriculum to Teach Effective Patient Care.
- NLN Consultation Visit - March 27, 28, 29.
- NLN Basic Psychiatric Nursing Project.

I. Preparation of proposal for revision of Basic Nursing Program - with omission of summer session. (Exhibit I - pages 7a and b) The major areas of unfinished business include:

* See Page 11a and 11b for Faculty Organization Plan and Committee Membership, 1956-57.

UNIVERSITY OF MASSACHUSETTS
School of Nursing
Basic Nursing Program

	Sept. Oct. Nov. Dec. Jan.	Feb. Mar. Apr. May	June	July	Aug.
First Year	English 1..... English Composition Speech 3..... Public Speaking Chem. 1..... General Chemistry Zool. 1..... Introductory Zoology Hist. 5..... Modern European Civilization Soc. 25..... Introductory Sociology Nursing 1..... Introduction to Nursing	English 2..... English Composition Speech 4..... Public Speaking Chem 2..... General Chemistry Psych. 26..... General Psychology Hist. 6..... Modern European Civilization Math. 12..... Functional Mathematics Nursing 2..... Fundamentals of Nursing I			
Second Year	CAMPUS English 25..... Humane Letters Chem. 33..... Organic Chemistry Zool. 37..... Human Anatomy & Physiology Home Ec. 41..... Nutrition & Food Prep. Soc. 53..... Introduction to Cultural Anthropology Nursing 25..... Fundamentals of Nurs. II	CAMPUS English 26..... Humane Letters Bact. 31..... Introductory Bacteriology Zool. 38..... Human Anatomy & Phys. Home Ec. 70..... Child Development Nursing 26..... Fundamentals of Nursing Care			
Third Year	CAMPUS Nursing 51 and 60 - Medical and Surgical Nursing I and II (includes Operating Room Nursing, Medical Dietetics and Clinical Nutrition, Pharmacology and Out-Patient Nursing)	CAMPUS	Vacation	Nursing of Children I Nurs. 52A Vassar College	Maternity Nursing Nursing 57
Fourth Year	SPRINGFIELD HOSPITAL Maternity Nursing (cont'd.) Nursing 57 Nursing of Children II Nursing 52B	Tuberculosis Nursing Nursing 56	Psychiatric Nursing Nursing 54	Public Health Nursing Nursing 58	Vacation
Fifth Year	WESSON MATERNITY HOSPITAL / SPRINGFIELD HOSPITAL Advanced Nursing Nursing 65	RUTLAND V.A. HOSPITAL Nursing 66..... Senior Nursing Seminar Nursing 67..... Social & Historical Foundations of Nursing Liberal Arts Electives	McLEAN HOSPITAL	SPRINGFIELD VNA & HEALTH DEPT.	
	NEW ENGLAND CENTER HOSPITAL	CAMPUS			

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UNIVERSITY OF MASSACHUSETTS
School of Nursing

Revision 1958-59 Catalogue

PROGRAM SEQUENCE

First Year

1st Semester	Credits	2nd Semester	Credits
English 1, English Comp.	2	English 2, English Comp.	2
Chemistry 1, General	3	Speech 3	2
History 5, Modern Europ. Civil.	3	Chemistry 2, General	3
Zoology 1, Introductory Zoology	3	History 6, Modern Europ. Civil.	3
Nursing 1, Introduction to Nursing	1	Mathematics 12, Functional	3
Sociology 25, Introduction to Sociology	3	Nursing 2, Fundamentals of Nursing I	1
		Psychology 26, General Psychology	3

Second Year

1st Semester	Credits	2nd Semester	Credits
English 25, Humane Letters	3	English 26, Humane Letters	3
Chemistry 33, Organic	4	Bacteriology 31, Introductory	4
Sociology 53, Intro. Cultural Anthropology	3	Home Ec. 70, Child Development	3
Home Ec. 41, Nutrition and Food Preparation	3	Nursing 26, Fundamentals of Nursing Care	4
Nursing 25, Fundamentals of Nursing II	4		
Zoology 37, Human Anatomy & Physiology	3	Zoology 38, Human Anatomy and Physiology	3

Third and Fourth Years

		Credits
Nursing 51	Medical and Surgical Nursing I	16
Nursing 60	Medical and Surgical Nursing II	16
Nursing 52A, 57, 52B	Maternal and Child Health Nursing	
	Unit I - Nursing 52A-Nursing of Children I	4
	Unit II - Nursing 57-Maternity Nursing	10
	Unit III - Nursing 52B-Nursing of Children II	10
Nursing 56	Tuberculosis Nursing	3
Nursing 54	Psychiatric Nursing	10
Nursing 58	Public Health Nursing	6

Fifth Year

Nursing 65	Advanced Nursing	8
Nursing 66	Senior Nursing Seminar	4
Nursing 67	Social and Historical Foundations of Nursing	2
	Liberal Arts Electives	10

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... Evaluation of course offerings in the physical and social sciences.
... Development of policies and program for student, teacher and course evaluation.
... Analysis and standardization of student records.
... Filing application for NLN Accreditation of Basic Nursing Program.
... Development of plan to further shorten basic nursing program.

II. Health Committee

Seven regular meetings of this committee were held during the past year. Major activities included:

A. Review of monthly reports of health status of students in clinical area.

B. Revision of various student health records.

C. Inauguration of BCG vaccination program for students in cooperation with Westfield State Hospital.

D. Formulation of policies regulating student employment during clinical aspects of the program.

E. Revision of student health policies and regulations.

F. Development of By-Laws for Student Council of School of Nursing, in cooperation with Student Government of the University of Massachusetts.

G. Inauguration of Poliomyelitis vaccination program for students in cooperation with University of Massachusetts Health Service.

III. Library Committee

A Library Committee for the School of Nursing was established in May, 1957 as a standing committee of the Faculty Organization. One meeting was held for the purpose of identifying committee functions and establishing priorities as regards committee activities for the ensuing year.

IV. Interagency Committees

A. Administrative Committees: (Note: Membership consists of representatives from the UMSN and a particular cooperating clinical agency and provides an official channel for handling interagency business of an administrative nature.)

1. Springfield Hospital:

Two meetings of this group were held during the past year. Major administrative matters discussed and acted upon include:

- policies regulating holiday allowance on service remuneration days
- policies regulating illness allowance and make-up for service remuneration days
- plans for utilization of part-time services of Instructors in O. R. Nursing and Clinical Nutrition
- plans for evening and night practice for UMSN students
- policies regulating student employment during the clinical program
- administrative aspects of summer and fall program for UMSN students
- revised record forms
- statement of UMSN Health Program at Springfield Hospital
- statement of Service Remuneration Policies at Springfield Hospital

2. McLean Hospital:

Two meetings of this group were held for the purpose of discussing the details of an interagency agreement regarding the utilization of selected clinical resources at McLean Hospital for UMSN students in the area of psychiatric nursing. These included:

- program policies
- service remuneration policies
- student health policies
- student personnel policies

3. New England Center Hospital:

One meeting of this group was held to discuss the details of the Senior Internship to be offered at the New England Center Hospital. These included:

- program plan
- student personnel policies
- student service remuneration plan
- available library and office facilities

4. Consulting Administrative Committee on Tuberculosis Nursing:

Two meetings of this intercollegiate administrative group were held for the purpose of hearing the annual report of the Chairman of the program and for arranging the intercollegiate rotation schedule.

5. Wesson Maternity Hospital:

Five meetings of this group were held during the past year. Major activities included:

- the presentation of an evaluation of the UMSN Family-centered Maternal Care Program (for Summer, 1956)
- discussion of problem areas, including interdepartmental rotation of students, student assignments, education and administrative records.

6. Springfield Visiting Nurse Association and Springfield Health Department:

One meeting of this group was held for the purpose of planning for the utilization of the combined resources of these official and non-official agencies for the Public Health Nursing field instruction of UMSN students scheduled for Spring, 1957.

B. Coordinating Committees: (Note: Membership consists of representatives of the UMSN and a particular cooperating clinical agency and provides

for cooperative planning and action in the implementation of this basic program within the specifically designated clinical area.)

1. Medical and Surgical Nursing:

Two meetings of this group were held. Major activities included consideration of:

- policies and procedures for reportable incidents for UMSN students in clinical area
- need for an organized patient teaching program at Springfield Hospital
- need for a uniform nursing assignment sheet at Springfield Hospital
- specific problems in the area of nursing practice, involving procedures, equipment, supplies, etc.

2. Pediatric Nursing:

Four meetings of this group were held. Major activities included a consideration of:

- the proposed revision of visiting regulations for the pediatric unit
- Play Nurse Program for UMSN students
- development of Comment Card to be used as evaluative tool for this nursing unit.
- need for change in procedure relative to care of diapers on pediatric unit
- evaluation of Nursing 52 - Nursing Care of Children II (for Fall, 1956)

3. Tuberculosis Nursing:

One meeting of this intercollegiate committee was held for the purpose of evaluating the program objectives and suggesting needed revisions.

4. Public Health Nursing:

Two meetings were held to discuss the field experience in Public Health Nursing for UMSN students to be assigned to Springfield Visiting Nurse Association and Health Department in Spring, 1957.

V. Advisory Committee on Psychiatric Nursing

Eight members of the invited ten attended the first meeting February 13, 1957. All members expressed a good deal of interest in the possibility of integrating psychiatric principles throughout the curriculum. The following recommendations were made by the committee:

- That the threads of psychiatric principles should penetrate the entire curriculum beginning with the freshman students and continuing in each clinical area in order that the student would be able to use her psychiatric nursing experience more meaningfully.
- A closer working relationship with the university faculty members teaching the basic behavioral sciences.
- Developing the content for the course offering for the freshman and sophomore years.
- To consider the possibility of the faculty having a trial run for the purpose of identifying the broad areas of I.P.R.
- That a psychiatrist be available to the psychiatric nurse faculty member for consultation.

... Development of a file of patients having a psychosomatic condition and to be used during the teaching of the care of the hospitalized adult patient.

... That members of the Advisory Committee be available for direct consultation as needed.

As a follow-up to one of the recommendations of the committee, a meeting was held on April 29, 1957 with Dr. Solis Kates, Clinical Psychologist, University of Massachusetts and Mr. Arnold Levine, Instructor in Sociology, who substituted for Dr. Edward Driver. This initial meeting served to explore various methods and content that could be used for integrating psychiatric principles in the freshman course. Both members expressed their interest and willingness to work with the psychiatric faculty member in developing the content for this basic course.

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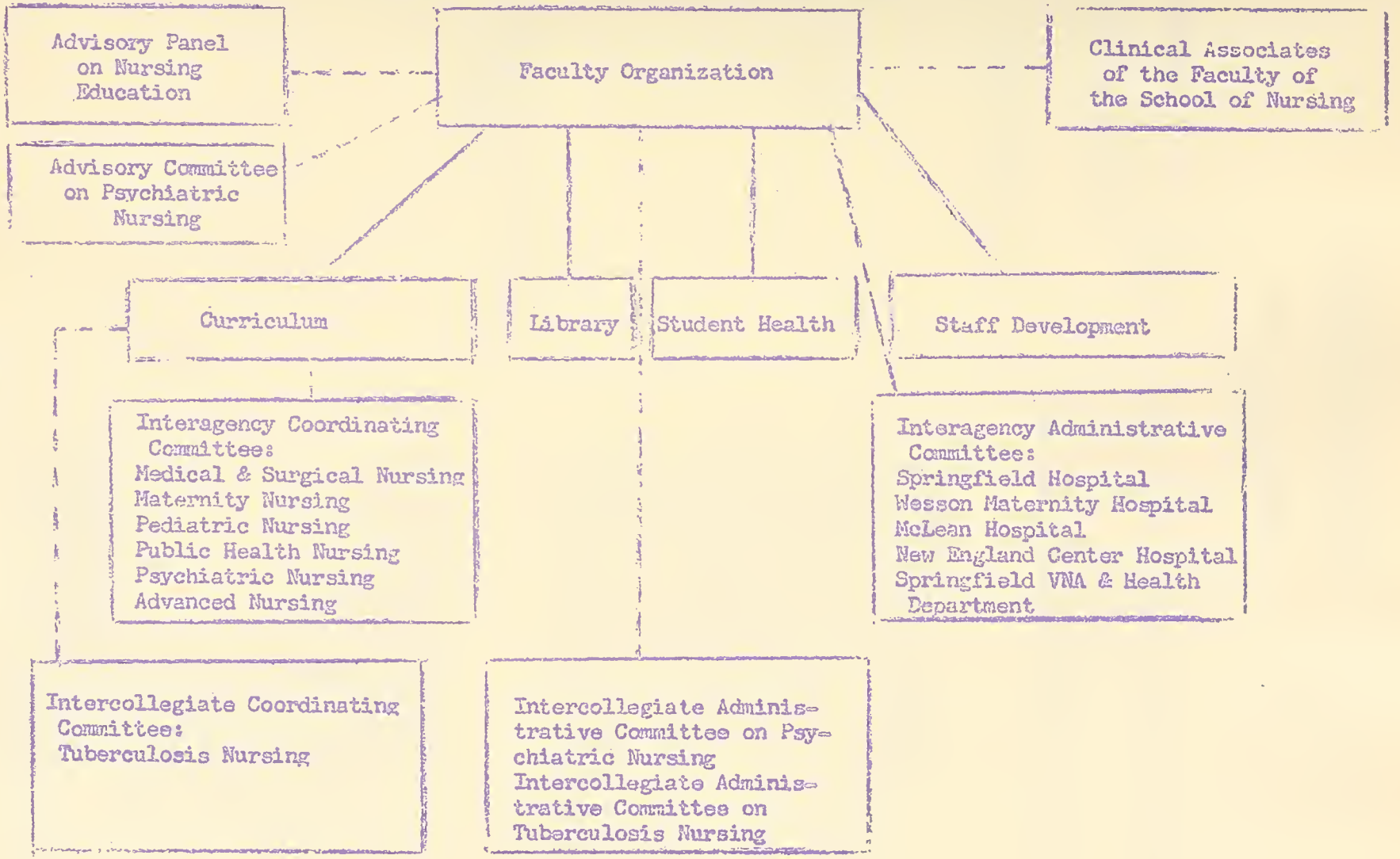
FACULTY ORGANIZATION OF SCHOOL OF NURSING



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UNIVERSITY OF MASSACHUSETTS
School of Nursing

COMMITTEE MEMBERSHIP
1956-1957

Educational Policies Council: Miss Mary A. Maher
Miss Mary E. Macdonald-Faculty Representative

Faculty Organization: Chairman: Miss Maher
Secretary: Miss Macdonald
Members: Full-time instructional staff

Standing Committees:

A. Curriculum
Chairman: Miss Macdonald
Secretary: Miss Gellestrina T. DiMaggio
Members: Full-time instructional staff

B. Student Health
Chairman: Miss Mary E. Gilmore
Secretary: Miss Macdonald
Members: Full-time instructional staff

C. Staff Development
Chairman: Miss DiMaggio
Secretary: Miss Gilmore
Members: Full-time instructional staff

D. Library
Chairman: Miss Winifred A. Kelly
Secretary: Miss Gilmore
Members: Full-time instructional staff

Interagency Coordinating Committees:

A. Medical and Surgical Nursing
Chairman: Miss Gilmore
Secretary: Miss Macdonald
Members: UMSN - Miss Maher (ex-officio)
Miss Kelly
SPRINGFIELD HOSPITAL -
Miss Busche (ex-officio)
Miss Mitton
Mrs. Kellogg
Mrs. Forys
Miss Duda
Mrs. Swedburg
Miss Murphy

B. Pediatric Nursing
Chairman: Miss DiMaggio
Secretary: Miss Macdonald
Members: UMSN - Miss Maher (ex-officio)
Miss Kelly

SPRINGFIELD HOSPITAL -
Miss Buscho (ex-officio)
Miss Mitton
Miss Briggs
Miss Rude
Miss Levesque
Miss Bates

C. Maternity Nursing
Chairman: Miss Maher
Secretary: Miss Macdonald
Members: UMSN - Miss DiMaggio
Miss Kelly
WESSON MATERNITY HOSPITAL -
Miss Hogan (ex-officio)
Mrs. Picarczyk
Mrs. Mullarkey
Miss Mitchell
Mrs. Simon
Mrs. Benjamin
Mrs. Steele

Interagency Administrative Committees:

A. Springfield Hospital
Miss Maher — Miss Buscho
Miss Macdonald — Miss Mitton
Miss DiMaggio — Miss Bates
Miss Gilmore

B. Wesson Maternity Hospital
Miss Maher — Miss Hogan
Miss Macdonald — Mrs. Picarczyk
Miss DiMaggio — Mrs. Mullarkey

C. McLean Hospital
Miss Maher — Miss Tibbetts
Miss Macdonald — Mrs. Makin
Miss Kelly

D. Springfield VNA
Miss Maher — Miss Hutchins
Miss DiMaggio — Miss Waite

E. Springfield Health Department
Miss Maher — Miss MacNally
Miss DiMaggio

Special Advisory Committees:

A. Consulting Administrative Committee on Tuberculosis Nursing - UMSN - Miss Maher
B. Advisory Curriculum Committee on Tuberculosis Nursing - UMSN - Miss Macdonald
C. Advisory Committee on Teaching of Psychiatric Nursing in Basic Collegiate Program:
Dr. William Cunnick, Jr., Spgfd.-Medicine
Dr. Michael Green, Spgfd.-Psychiatry
Dr. Calvert Stein, Spgfd.-Neuro-psychiatry

Dr. Morris Schwartz, Cambridge-Sociology
Dr. Edw. Driver, Univ. of Mass.-Sociology
Dr. Solis Kates, Univ. of Mass.-Psychology
Dr. Otis Maxfield, Spgfd.-Religion
Mrs. Frances Lenehan, Mass. Dept. of Mental Health
Miss Ruth Simonson, U.S. Public Health Service
Mr. Howard Parad, Smith College, Social Work
Provost McCune
Faculty of the School of Nursing

Panel on Nursing Education:

Miss Margaret Varley - Harvard School of Public Health
Miss Ethel Brooks - Chief, Public Health Nursing, Mass. Dept. of Public Health
Miss Ruth Sleeper - Mass. General Hospital School of Nursing
Miss Marie Farrell - Boston University School of Nursing
Miss Phyllis Caswell - Bingham Associates Program
Miss Agnes Fuller - U.S. Children's Bureau
Miss Ruth Simonson - U.S. Public Health Service
Dr. Jack R. Ewalt - Commissioner, Mass. Dept. of Mental Health
Dr. Samuel Kirkwood - Commissioner, Mass. Dept. of Public Health
Dr. Leon Bradley - First Assistant to the Commissioner, Mass. Dept. of Public Health
Miss Grace Buxton - UNiv. of Mass. Board of Trustees
Mrs. J. Archie Cunningham - Lay Person
President Mather
Provost McCune
Faculty of the School of Nursing

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PART THREE

Basic Nursing Program

I. Courses in Nursing - (October 1956 - 1957)

A. Fall Semester, 1956

		Credit	Weekly Class Hours
Nursing 51	Medical and Surgical Nursing I Medical & Surgical Nursing - Miss Gilmore & Staff Physicians Pharmacology II - Miss Macdonald Human Anatomy & Physiology - Miss Macdonald Clinical Nutrition Mrs. Sector Operating Room Nursing Miss LaDuc	16	24
Nursing 52B	Nursing of Children II Miss DiMaggio and Staff Physicians	5	24

B. Spring Semester, 1957

Nursing 58	Public Health Nursing Miss Maher, Professional Staff of the Springfield VNA & Springfield Health Department	4	15
Nursing 60	Medical & Surgical Nursing II Miss Gilmore, Miss Macdonald, Staff Physicians	4	24
Nursing 54	Psychiatric Nursing Miss Kelly, Staff Psychiatrict, Professional Staff of McLean Hospital	6	24
Nursing 26	Orientation to Nursing Miss Gilmore, Miss DiMaggio, Miss Macdonald, Miss Kelly	4	7
Home Ec. 70	Child Development Miss DiMaggio	3	4
Nursing 56	Tuberculosis Nursing Mrs. Bess Ellison	3	17

		Credit	Weekly Class Hours
C. Summer Session, 1957			
Nursing S27	Fundamentals of Nursing Miss Gilmore, Miss Petrone	7	22
Nursing S28	Social and Historical Foundations of Nursing Miss Maher	2	2
Nursing 52A	Nursing of Children I Faculty of the Vassar Summer Institute	4	-
Nursing 60C	Medical & Surgical Nursing II Miss DiMaggio	2	-
Nursing 57	Maternity Nursing I Miss Ostrander, Miss DiMaggio, Miss Kelly and Obstetrical & Pediatric Staff of Wesson Maternity Hospital	3	24

* * * * * * *

Educational Offerings for Graduate Nurses on Job-Related Areas

Summer Session, 1957

Nursing 73 (G.N.)	Curriculum Reconstruction in Basic Schools of Nursing Miss Macdonald & Resource Personnel	2	30
Nursing 52 (G.N.)	Nursing Services for the School Age Child Miss Murphy & Resource Personnel	2	30
Nursing 70 (G.N.)	Management of Nursing Mrs. Newcomb	2	30

* * * * * * *

II. Comments on Clinical Aspects of Basic Program

A. Fall Semester, 1956

1. Nursing 51 - Medical and Surgical Nursing

The first course in medical and surgical nursing was completed by the second class of students enrolled in the nursing program, no

major revisions in the program having been made. The services of a clinical nutritionist, a member of the faculty of the Springfield Hospital School of Nursing, were used on a part time basis, thus permitting the teaching of the aspects of clinical nutrition on a more integrated plan. (A block plan had been resorted to for the previous class due to inavailability of full-time personnel.)

These students also completed the experience in operating room nursing using an approach which varies somewhat from the traditional. An attempt was made to help the student gain more insight into the complete care of the person undergoing surgery and, also, meet the present requirements of the Board of Registration in Nursing. The first four weeks of the eight week block were spent in the operating room suite, exclusively, learning the fundamental skills required by the nurse to become a member of the surgical team. The second four weeks were divided, with one week spent in the Recovery Room learning how to administer immediate post-operative care and how to manage surgical emergencies. During the other three weeks, the student was assigned to selected patients. She prepared the patient for surgery, observed or assisted during surgery and gave immediate postoperative care in the recovery room as well as in the patient's unit when he returned. During this period, the students kept records of their observations and nursing care plans for two patients as well as making a study of a particular phase of surgical nursing.

The students enjoyed this type of experience. They felt the opportunity to follow patients through the various phases of surgical care gave them an appreciation of the effects of continuity of care both for the patient and the nurse in the learning situation which they would not have had otherwise. The interest in the patient on the part of the student served as an impetus to the surgeon to participate more in teaching and developing an awareness of the role of the nurse. It would seem that with better planning, the first four week period could be made more stimulating by arranging a series of conferences in which the students, the instructor in the operating room and the clinical instructor participate to discuss the patient in relation to the surgical procedure. It would, also, be worthwhile to consider a change by shortening the first four week block and distributing the type of assignment made in the second four weeks throughout the course or using it when the experience would be most beneficial for the student.

2. Nursing 52B - Nursing of Children II

The first class of students completed their experience in pediatric nursing in January. This was the culmination of the maternal and child health program that began in July 1956 with the students participating at the Vassar Summer Institute and which included also their experience in maternity nursing in the Summer of 1956.

Appreciating that an understanding of growth and development is basic to caring for the sick child, the content of this course was built upon the student's understanding of growth and development and was extended to include the health needs and illnesses of children

at various stages. Although constant interpretation of the program was necessary to nurses, doctors, play teacher and other personnel, the instructor was given complete freedom to select the student assignments and supervise the care given by the students. Due to the cooperation of the staff of Springfield Hospital, the objectives of the course were satisfied. Many of the problem areas encountered by the student in giving qualitative care to the hospitalized child are being considered in pediatric interagency meetings.

Although the program provided adequate facilities and experiences in the care of the hospitalized child, there continues to be a need to improve the student experience in an out-patient department. In an attempt to alleviate this situation, the students attended the clinic at Shriner's Hospital, which is devoted to orthopedic conditions of children. Serious consideration is being given to the utilization of pediatrician's offices, with full realization that the problem of supervising such an experience would be a difficult one.

B. Spring Semester, 1957

1. Nursing 58 - Public Health Nursing

A ten week course in Public Health Nursing was completed by the first class of students on March 23, 1957, in which theory and practice in public health nursing were offered concurrently.

In order to provide the student with an appreciation of the services provided to families by both the official and non-official public health agencies, The Springfield Health Department and the Visiting Nurse Association were utilized.

The course was organized into five units:

Unit I - Introduction to Public Health Nursing
Unit II - Orientation to the Services of the Visiting Nurse Association of Springfield
Unit III - Orientation to the Nursing Services of the Springfield Health Department
Unit IV - Comprehensive Public Health Nursing Service to Selected Families
Unit V - Seminar and Reconstruction of Experience with Families

It was necessary to superimpose a concept of comprehensive family care upon a structure wherein the services have been fragmented. Nevertheless, the learning outcomes were, for the most part, satisfactory. The students developed self-confidence and improved their professional competency. This was evidenced by their increasing ability to appraise the family situation, to work with the family, and to interpret the health needs of the family to social agencies, to initiate conferences with social workers, to seek necessary information from physicians, and to surmount the obstacles inherent in the situation.

Principles of Social Case Work and Family Counseling was given as an integral part of the course in Public Health Nursing for senior

students. The psychiatric nurse faculty member functioned as a co-leader for seven two-hour sessions with a psychiatric social worker. The content of this course was primarily concerned with the Principles and Techniques of the Interview. This experience proved valuable to the students because they were able to see the interview as a means of utilizing themselves more directly in an interpersonal relationship for the purpose of helping the person to attain self-direction. In addition, the students were able to share with the psychiatric social worker the observations they had made in previous and current experiences.

During the second unit of the course, the students reconstructed their experiences with individual families. The psychiatric social worker and the director of Smith College School of Social Work served as resource persons to the students.

From this experience, one may wish to question the placement of this course in the curriculum. It would seem that the students would be ready to utilize themselves more constructively in a one-to-one relationship if the Principles and Techniques of Interviewing are continuously re-emphasized throughout the entire program.

Unquestionable, the course in Public Health Nursing could have been enhanced if a full time public health nurse faculty member had been available. Because of the limitations imposed by the budget, the Dean of the School of Nursing assumed the major responsibility with the assistance of the faculty members in Psychiatric and Pediatric Nursing.

The joint evaluation conferences seemed to indicate that the "trial run" had brought us to the place where we can look afresh at the type of experience needed for a collegiate nursing student, who because of her program, brings a new dimension to public health nursing service.

2. Nursing 56 - Tuberculosis Nursing

The first class of students completed a six-week program in tuberculosis nursing at the Veterans Administration Hospital, Rutland Heights, through the program administered by the Boston University School of Nursing. Their individual records give evidence of very satisfactory performance in this clinical area, which becomes more significant in light of the fact that this is an all-collegiate program in which a total of 137 students from seven collegiate schools of nursing participated during the past year.

The Curriculum Committee of the School of Nursing met with the director of this tuberculosis nursing program during the past year for the purpose of discussing objectives and interpreting specific learner needs.

It is anticipated that further coordination of objectives will be effected through the activities of the Intercollegiate Advisory Curriculum Development Committee, on which the school is represented.

A more critical evaluation of the experience as an integral part of the total curriculum is needed.

3. Nursing 54 - Psychiatric Nursing

The psychiatric nursing experience for the second class of students was held at McLean Hospital from March 12, 1957 to May 30, 1957 inclusive. An experimental approach to the teaching of psychiatric nursing was undertaken. In order to demonstrate the necessity for continuity of patient care, and the sustaining relationship that is so important, particularly in this area of nursing, each student worked with a selected male and female patient for a period of one to one and one half hours daily during this twelve week experience. The students were assigned to the clinical area as follows:

One student - convalescent male Unit) for 12 weeks
One student - convalescent female Unit)
One student - Actively disturbed male Unit) for 12 weeks
One student - Actively disturbed female Unit)

In addition, the students assigned to convalescent units worked with selected patients on actively disturbed units for a designated period of time each day, while the students assigned to actively disturbed units worked with selected patients on convalescent units.

Thus, it was possible for the students to work with two selected patients for a total period of three hours daily. A daily I.P.R. record of interaction with each patient was kept, and each student shared her experiences with her classmate during class discussions and at conferences. Each student presented her patient care study at a staff conference at the end of the experience.

The students liked working with selected patients as this provided an opportunity for them to assume responsibility for the organization of a selected type of patient care. They felt that assignment to one unit during the twelve week experience was valuable in that they became quite familiar with the personnel and the operation of one unit, established and maintained effective relationships with the other patients on the assigned unit; became familiar with the operational philosophy of the clinical ward administrator, and appreciate the necessity for maintaining consistency of these philosophies in order to provide security for the patient.

4. Nursing 26 - Orientation to Nursing

The third class of students (fourteen in number) completed their first course in nursing during the Spring semester.

Thirty-hours of this course were devoted to a presentation of those basic principles and methods of teaching which will be applied and extended throughout the basic program in a variety of student teaching relationships. Nurse teacher versus student learner and student teacher versus patient learner situations are studied.

Fifteen hours were spent in studying nursing as a profession and its relationship to other professions in the health field.

Group sessions (comprising of eleven hours) were held with the psychiatric nurse faculty member. This was an exploratory unit in Interpersonal Relations in Nursing. Through the technique of group discussion, the students were exposed to a new method in discussing and analyzing their problems in relation to themselves. It is difficult to evaluate this unit due to the limited number of class sessions. No scientific methodology had been established for measuring its effectiveness.

Since this group consisted of fourteen students, some changes had to be made in Unit III of the course. The students' experience with people in the nursing homes was decreased as only one nursing home could be used since it was within walking distance. No transportation was available. The number of persons in this home was fourteen. All were not suitable for students to be assigned to work with, therefore, the class had to be divided into two sections. This meant each section visited the home every other week, whereas the previous classes had a weekly contact.

The ratio of instructor to students was one to seven in contrast to a one to four ratio with the two previous classes.

Despite these changes, the students seem to benefit from this experience. Though number of hours and amount of supervision was decreased, there was more opportunity for students to develop initiative. It would seem that this group was able to proceed in the hospital situation later, equally as well as those students who had more hours and supervision. Repeating this experience for a third time with instructors and receptive nursing home personnel, undoubtedly contributed greatly to the value of this experience.

5. Nursing 60 - Medical and Surgical Nursing II

This course was offered for the first time this past year to the first class of students in the school, now in their senior year. The course is a continuation of Medical and Surgical Nursing I, providing the student with an opportunity to give nursing care to patients with special health problems requiring greater knowledge and skill. The student takes a more active part in planning nursing care and in individual and group teaching of patients. Clinical practice is provided with patients in special medical and surgical services.

It was difficult to provide experience with patients who had special health problems since they are not readily available at Springfield Hospital. For example, the daily average census of patients with urological problems is twelve, and with orthopedic problems, nineteen. These patients are not on segregated services but are located throughout the house. This limits the students' opportunity for contact with these patients. Therefore, much emphasis was placed upon the implications in these areas for all nursing and specific problems had to be managed in the more academic manner.

The limited facilities and personnel for rehabilitation in Western Massachusetts limits the students' opportunity to participate in

this phase of nursing. Field trips, films and conferences with personnel in this area were utilized to the utmost.

An opportunity to work with acutely ill and dying patients was a rewarding experience for the students. As seniors, they felt they could give the kind of nursing care needed by these patients as well as the supportive help needed by members of their families.

An increasing ability to initiate contact and join in planning with the social worker, doctor and others is evident now.

Experience in the Out-Patient Department gave the senior students an opportunity to increase their interviewing and teaching skills as well as become more cognizant of the health needs of the ambulatory patient. Limited provision for comprehensive health evaluation of persons admitted to this department was a lack in the students' education in this area.

The students' experience in the Emergency Room was planned to coincide with their class experience in first aid and disaster nursing, thus providing for some correlation. This experience was of value in helping them to function adequately with people in various degrees of distress and emergency. An appreciation of the reaction of people under stress as well as the services provided for them in a general hospital was gained. Limited physical facilities and equipment was a deterrent to qualitative care.

6. Home Economics 70 - Child Growth and Development

For the first time, the instructor of pediatric nursing taught this course for students of nursing in their second academic year.

The students considered this a good experience and identified with the instructor as a nurse and recommended that she continue to teach the course. However, one question was the advisability of:

- offering this course one year before the students are assigned to maternal-child health experiences
- a weekly observation period of one hour with no opportunity provided to work with children
- an experience in a nursery school where there is a lack of prepared personnel

This may be a course that could be included as part of a maternal-child health program.

C. Summer Session, 1957

1. Nursing S28 - Social and Historical Foundations of Nursing

The course was given during the summer period at the Springfield Hospital to the third class of students who were also taking Fundamentals of Nursing.

Three visiting lecturers from the field of nursing and nursing education participated in the course. The content of these lectures

included the Role of the Early Christian Church in Nursing; changes in Nursing Education following the Study of Nursing Education in 1920; and the contribution of nursing educators to nursing education in other lands.

Following an introduction to the course, the students assumed the major responsibility for the class. A pair of students or a group of 5-6 students selected an area in nursing for presentation. The methods of presentation were identified by the class as a whole. While the outcomes of the class may be considered to be good, one may well question its placement.

The reading assignments of such a course, while essential, are time consuming; the interval between classes is short (2-class sessions a week) and the students, themselves, are more strongly motivated toward and concerned with their direct roles with the patients.

2. Nursing S27 - Fundamentals of Nursing

This course was conducted essentially the same as in previous years. A group of fourteen students necessitated some changes in the management of supervised clinical nursing laboratory practice. Two instructors participated in teaching the eight week course.

Two nursing units were utilized for the students' experience with patients. Students remained on the same nursing unit for the eight week period. This provided ample experience and facilitated better supervision of a larger group. The students expressed the same interest as other students with the more dramatic hospital situation and opportunity to work with a younger age group.

3. Nursing S2A - Nursing of Children I

The second class of four students completed their experience as undergraduates at the Vassar Summer Institute for Living. The students felt this was a strenuous program and different from their usual time schedules for classes and practice in nursing. However, they indicated this experience should be retained as part of the program.

Although investigations are underway to provide this experience for a third group of students one needs to evaluate:

- whether the facilities at Vassar can accommodate an increasingly large number of students
- the cost of the program to students (Vassar College has provided scholarships that covered 60% of the cost for each student)
- proposed changes in the program whereby summer sessions would be omitted (this experience is available only in July)
- should this be an elective experience

4. Nursing 60C - Medical and Surgical Nursing II

This unit in Medical and Surgical Nursing, of four weeks duration, provided the senior students with an opportunity for two weeks of

evening practice and two weeks of night practice on one unit.

The students evaluated this as an excellent experience. The student logs and conferences indicated that not only had the objectives of the unit been met but that the students had grown in their ability in being increasingly self-directive and utilize the resources that are available to them.

It is suggested that this experience be planned for the second group of students and consideration be given to offering "Principles of Management" preceding or following the experience. With contemplated changes in the program where this experience would have to be offered after nine months of clinical experience, it is questionable that it would provide a good learning experience.

5. Nursing 57 - Maternity Nursing

This eleven-week course was completed by the second class of students on October 20, 1957, utilizing the clinical resources of the Wesson Maternity Hospital in Springfield.

The course content was developed around the meaning of pregnancy to the patient and the family with special emphasis on the understanding of the mother's physiological and psychological needs before, during, and after the birth of the infant. The specialized abilities of the nurse were taught in relation to an understanding of the phenomena of pregnancy, the birth process, immediate care of the mother and infant, newborn care, the importance of early constructive mother-child relationship and patient teaching. Clinical experience in the prenatal clinic, labor and birth room, newborn and premature nurseries, post-partal units, including Mother-Baby Care Unit, and clinics.

An analysis of both instructor and student evaluations of this experience seem to indicate that the objectives of this course had been achieved. Factors which were mentioned as deterrents in the implementation of this family-centered maternal-child course included:

- lack of clinical materials necessary for providing student experience in care of mothers during first trimester
- difficulties in arranging for family visits through local V.N.A.
- dearth of parents who have participated in program for preparation for childbirth, and consequent lack of student participation in this phase of program
- difficulties pursuant to utilization of temporary faculty member as instructor in this course
- difficulties inherent in implementing program around service remuneration day schedule

III. Comments on Job-Related Work Conferences for Graduate Nurses - (June 1957)

Three one-week, two credit, job-related conferences were offered from June 10 through June 15, with a total enrollment of 78 graduate nurses.

The conference on Curriculum Reconstruction in Basic Schools of Nursing had an enrollment of twenty-two instructors, representing fourteen different schools of nursing within the Commonwealth. Miss Macdonald conducted this conference, with the other faculty members serving as resource personnel.

The conference on Nursing Services for the School Age Child was conducted by Miss Rita Murphy, Educational Director of the Rhode Island State Department of Health, with the assistance of Miss Margaret Reilly, Consultant in Child Growth and Development and Dr. Mary Thorp, Director of Teacher education, Rhode Island School of Education. Twenty-eight graduate nurses attended this conference.

The conference on Management of Nursing was conducted by Dorothy Perkins Newcomb, author of text on "Team Nursing." Twenty-eight graduate nurses attended this conference.

There was little question but what the graduate nurses, enrolled in each Work Conference, felt generally well pleased with the experience. They were appreciative, too, of the competency of each work conference leader, the resource personnel, and the friendliness of the University community.

Providing educational opportunities to the graduate nurse, who wishes to improve her practice, through job-related work conferences is a service the University can well provide. This is particularly true in view of the geographical isolation of the nurses in Western Massachusetts from Boston, and the rising tuitional costs in the schools in metropolitan areas.

Unquestionably, planning should have been initiated sooner. The placement of the work conferences at the end of an academic year may well be questioned, particularly when the faculty of the School of Nursing is to assume the major and direct responsibility for them. The nature of the educational background of such a hetrogenous group creates difficulty in teaching, and it may well be desirable to specify eligibility qualifications for future work conferences' participants.

IV. Comments on Basic Courses Introduced in Fall Semester, 1957

A. Nursing 65 and 70: Senior Nursing Internship (4 credits) and Principles of Management (2 credits)

This fifteen week program has been planned for the first class of students in cooperation with the New England Center Hospital and the Boston Dispensary, for the period October 14, 1957 - January 24, 1958. The purposes of this program have been identified as follows:

1. To extend and enrich the clinical nursing competency of the senior student in selected areas, including neuro-, thoracic, cardiovascular and orthopedic surgery.

2. To enhance her concept of comprehensive nursing care, including rehabilitation.

3. To provide for instruction in the principles of management, including team nursing, and for experience as a member and co-leader of nursing team.

Nine days of this period will be reserved for experiences with the ambulant patient at the Boston Dispensary.

During this period, educational services will be purchased from the faculty of Boston University School of Nursing. Our psychiatric nursing faculty member will be with the students two days a week in order to coordinate the program.

B. Nursing 1: Introduction to Nursing

This course is designed to assist the student in her personal adjustment to the basic collegiate nursing program.

Approach: this is an experimental course where emphasis will be on the personal adjustment of the individual student in the basic collegiate program and will include those aspects which form the basis of human adjustment.

Objectives:

1. To help the students become aware of their own feelings, attitudes and values and the way in which they communicate these.

2. To analyze the effect their behavior has on others.

3. To assist the student to accept herself with understanding and respect.

4. To assist the student to become more perceptive of the factors that govern human behavior in various life situations.

5. To help the student become a responsible and active member of the college community.

6. To aid the student in developing her self-actualizing potential.

Course Evaluation - Student Growth

Through the cooperative endeavor of the clinical psychologist and the nursing instructor, several test forms have been constructed to measure students' likes and dislikes, attitudes and perceptions of themselves and why they selected nursing as a career.

These test forms will be administered at the beginning of the course and at the completion of the course and a report will then be compiled.

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PART FOUR

Report of Student and Faculty Activities

I. Student Activities

A. Nursing Club:

Eight meetings of the Nursing Club, the recognized student organization of the School of Nursing, were held during the past year, in addition to the eight regular meetings of the Board of Directors. It is through this organizational medium that the University of Massachusetts School of Nursing holds membership in the district, state and national organizations of students of nursing.

The major activities of this club during the past year, have included:

1. National, state, local meetings:
   a. participation in District #1, Mass. State Council of Student Nurses meetings
   b. participation in meetings on state level-
      - 4 representatives attended the Annual Meeting at the Hotel Somerset in Boston on November 14, 1956
      - 16 representatives participated in the Annual Florence Nightingale Service on May 22, 1957
      - a member of the Junior Class served as Chairman of the Mass. Student Nurse of the Year Selection Committee
   c. participation in meetings on national level-
      - 2 delegates were sent to the National Student Nurse Association Convention in Chicago - May 6-10, 1957

2. Hostesses for:
   - Fall meeting of District #1, MSCSN, November 8, 1956
   - Future Nurses Club of Amherst High - March 13, 1957
   - Annual Florence Nightingale Service - MSCSN - May 22, 1957 (Approximately one thousand students of nursing, representing various schools within the commonwealth, attended this meeting which was held on campus)

3. Ways and Means Projects:
   - Series of Cake Sales in downtown store
   - Participation in Amherst Community Fair, May 17-18, 1957

4. Other:
   - Development of Club Membership Card
   - Designing of School of Nursing Cape

5. Program Meetings:
   - Club Picnics - October 4, 1956 and May 20, 1957

- Luncheon Meetings - 3
- Dinner Meetings - 3
- Evening Programs - 2

The students have become increasingly interested and active during the past year in the organizational activities of students of nursing at the various levels. The projected budget of the Nursing Club has grown steadily over the past few years.

A member of the junior class was elected to the office of President of the Mass. State Council of Student Nurses for 1957-58.

B. Student Council of the School of Nursing:

During the past year, the constitution of the Student Council of the School of Nursing was drawn up in cooperation with the student government of the University of Massachusetts. The purpose of this council is to provide for the continuation and unification of student government during the clinical portion of the nursing program through the parent committees - The Student Senate Activities Committee and the Women's Judiciary Committee of the University of Massachusetts.

II. Faculty Activities

In addition to their regular administrative teaching and counseling activities, the faculty of the School of Nursing has participated individually and collectively as follows:

A. Participation in the planning and implementation of educational and other services within the University.

1. All-University Committee Membership:
   - Miss Maher:
     - ... University Senate, member
     - ... Health Council, Chairman
     - ... Provost's Administrative Council, member
     - ... Dean's Luncheon Group, member
   - Miss DiMaggio:
     - ... Records and Admissions Committee
   - Miss Macdonald:
     - ... Course of Study Committee, member
     - ... University Open House, member

2. School of Nursing Committee Membership:
   - Miss Maher:
     - ... Faculty Organization, Chairman
     - ... Interagency Administrative Committees, Chairman
     - ... Curriculum, Staff Development and Health Committees, member
   - Miss DiMaggio:
     - ... Staff Development Committee, Chairman
     - ... Interagency Coordinating Committees on Pediatric and Maternity Nursing, Chairman
     - ... Interagency Coordinating Committee on Public Health Nursing, Secretary

... Curriculum Committee, Secretary
... Faculty Organization and Health Committees, member

- Miss Gilmore:
  ... Health Committee, Chairman
  ... Interagency Coordinating Committee on Medical and Surgical Nursing, Chairman
  ... Staff Development Committee, Secretary
  ... Library Committee, Secretary
  ... Faculty Organization and Curriculum Committee, member
- Miss Kelly:
  ... Library Committee, Chairman
  ... Interagency Coordinating Committees on Medical & Surgical Nursing, Pediatric Nursing, Maternity Nursing, Public Health Nursing, member
  ... Interagency Coordinating Committee on Psychiatric Nursing, Chairman
  ... Advisory Panel on Nursing Education, Secretary
  ... Advisory Committee on Psychiatric Nursing, Secretary
  ... Faculty Organization, Curriculum Committee, Health Committee, member
- Miss Macdonald:
  ... Curriculum Committee, Chairman
  ... Faculty Organization and Health Committees, Secretary
  ... Interagency Coordinating Committees (Pediatric Nursing, Medical and Surgical Nursing, Administrative), Secretary
  ... Staff Development, member
  ... Nursing Club, Faculty Advisor

B. Participation in the planning and implementation of programs related to the improvement of patient care and nursing education.

1. Organizational Activities:
   - Miss Maher:
     ... First Vice-President, District I, Mass. State Nurses Asso.
     ... Vice-President, Massachusetts League for Nursing
     ... Coordinating Chairman of Program Committee, District I, MSNA and Western Mass. League for Nursing
     ... Member:-N.E. Regional Conference for Public Health Nursing Education
     -Steering Committee of N.E.Regional Conference for Public Health Nursing Education
     -Special Task Force to Seek Funds for N.E.Regional Conference for P.H.N.E.
     ... Member:-Committee on the Study of Nursing Needs and Resources in Massachusetts
     -Steering Committee on the Study of Nursing Needs and Resources in Mass.
     ... Member:-Advisory Committee on Study of "The Role of the Professional Nurse in Selected Out-Patient Departments;" Boston University Human Relations Center
     -Steering Committee of Research Project as listed above
     ... Member:-Mass. League for Nursing, Department Baco.& Higher Degrees Program

... Member:-Intercollegiate Committee for Psychiatric Nursing
... Member:-Interdivisional Council Psychiatric Nursing, Mass. League for Nursing
... Member:-Intercollegiate Administrative Committee on Tuberculosis Nursing
... Member:-Board of Directors, New Hampshire Cerebral Palsy, Inc. -Task Force to Exploratory Committee to Consider the Need for "A Study of the Cerebral Palsied Person (Age 15-30 yrs.) in the Connecticut Valley , New Hampshire and Vermont"
... Leader:-Regional Work Conference (N.H. and Vermont) "Improvement of Nutrition Education in Basic Schools of Nursing," Hanover, N.H.
... Member:-Advisory Panel, Catherine Laboure Center Home Nursing Service
... Member:-Nursing School Committee, Franklin County Public Hospital School of Nursing
... Area Nurse Officer, Civilian Defense

- Miss DiMaggio:
... Member:-Advisory Council, Yale University School of Nursing
... Member:-Dept. of Baccalaureate and Higher Degree Programs, NLN
... Member:-Western Massachusetts League and MSNA, District #1

- Miss Gilmore:
... Member:-Advisory Council, Mass. General Hospital School of Nursing
... Member:-Advisory Committee, Merrimac College, Division of Nursing
... Chairman:-EACT Section, District #1, MSNA
... Chairman:-Nominating Committee, Dept. of Baccalaureate & Higher Degrees, Mass. League for Nursing

- Miss Kelly:
... Member:-Dept. Baccalaureate & Higher Degree Program, NLN
... Member:-Program Committee - Interdivisional Council on Psychiatric Nursing
... Member:-NLN Committee on Civilian Defense
... Secretary:-Intercollegiate Committee for Psychiatric Nursing
... Associate Member:-American Sociological Society

- Miss Macdonald:
... Member:-Board of Directors, NLN
... Member:-Legislative Committee, MSNA
... Secretary:-NLN, Dept. of Baccalaureate and High Degree Programs and Member of Steering Committee
... Member:-N.E. Regional Conference for Public Health Nursing and Secretary of Ad Hoc Committee to Revise Evaluative Guide for P.H. Nursing Experience
... Member:-Advisory Curriculum Committee on Tuberculosis Nursing, Veteran's Administration Hospital, Rutland Heights, Mass.
... Member:-Study Group on Development of Regional School of Nursing, Greater Boston United Community Nursing Council
... Consultant in Nursing Education, Franklin County Public Hospital, Greenfield, Mass.

2. Other Activities:

- Miss Maher:
  a. Speaker-
    .. Graduation - Westfield Hospital School of Practical Nursing
    - Franklin County Public Hospital School of Nursing
    .. 15 Anniversary - University of Conn. School of Nursing
    .. Annual Meeting - Great Barrington Visiting Nurse Assn.
    - New Britain Visiting Nurse Assn.
    .. Dinner Meeting - Western Mass. Branch of Mass. Industrial Nurses Assn.
    .. Future Nurses Club - Easthampton High School
    .. Monthly Meeting - St. Brigid's Church, Marian Guild
    .. Monthly Meeting - Hampden County Business and Professional Women's Club
  b. Articles submitted to Nursing Outlook for publication- (co-author)
    .. "Can the Teaching of Operating Room Nursing be Patient-Centered?"
    .. "Regional Planning for Public Health Nursing Education Moves Forward in New England"
- Miss Kelly:
  a. Speaker-Business and Professional Women's Club, Hampden County
- Miss Macdonald:
  a. Speaker-
    .. Nursing Legislation in Massachusetts - District #1, MSNA
    - District #2, MSNA
    - District #5, MSNA
    .. Chairman, Career Day Program, sponsored by Worcester Medical Association Auxiliary
    .. Southeaster League for Nursing, Annual Meeting
    .. Graduation Address, Newport Hospital School of Nursing
    .. Institute on Career Day Programs, NLN

C. Faculty Attendance at Professional Meetings:

Date	Meeting	Place	Faculty Members Attending
Oct. 19, '56	Mass. State Nurses Assn. Annual Convocation	Swampscott, Mass.	Mary A. Maher
Nov. 14, 15	Mass. League for Nursing Annual Convention	Boston, Mass.	Gellestrina T. DiMaggio Mary E. Gilmore Winifred A. Kelly Mary E. Macdonald Mary A. Maher
Nov. 26, 28	Conference of Council of Member Agencies, NLN Dept. of Baccalaureate & Higher Degrees	Chicago, Illinois	Mary A. Maher

Date	Meeting	Place	Faculty Members Attending
Feb.26,27 28,Mar.1	National League for Nursing - Curriculum Conference	New York City	Gellestrina T.DiMaggio Winifred A. Kelly
March	Institute on Epidemiology-USPHS Communicable Disease Center & Mass.Dept. of Public Health	Lemuel Shattuck Hospital - Jamaica Plain	Mary E. Gilmore
Mar.25,26	Child Study Assn. of America Annual Conference	New York City	Gellestrina T. DiMaggio
May 6-10	National League for Nursing, Annual Convention	Chicago, Illinois	Mary A. Maher Winifred A. Kelly
May 21	Workshops:"Some Problems of Basic Curriculum Planning in Maternal & Child Nursing"	Worcester,Mass.	Gellestrina T. DiMaggio
June 26,27 28	Institute on Disaster Nursing	Boston, Mass.	Miss Kelly
Sept.24	Mass. League for Nursing-Committee on Careers Institute	Worcester, Mass.	Gellestrina T. DiMaggio

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PART FIVE

Planning for 1957 - 1958

Prepared by the
Dean of the School of Nursing

1957-58
A Year of Particular Significance

A. Basic Program

The coming year will be one of particular significance for the faculty of the School of Nursing for several reasons:

Graduation of the First Class

In June 1958, four members of the first class will receive their degrees. The occasion will give tangible evidence of the progress which the school has made since its establishment. These graduates will be in a position, as alumnae, to help the faculty evaluate the educational offerings of the program.

Curriculum Reconstruction

While some changes in the program have been made periodically, based on the experiences of the faculty, this year we will critically reevaluate our philosophy and purposes. It is our conviction that the desired length of the program can be more intelligently determined after this initial step. We can then develop a curriculum and identify the learning opportunities essential for the implementation of the school's philosophy and purposes.

The experiences of the faculty over the past three years, and the additional help of two new faculty members (now six in number) should enable us to make constructive gains in the accomplishment of our task of curriculum reconstruction.

Factors which may limit our progress are identifiable in three primary areas: 1) a faculty inadequate in number for the implementation of our program, (budgetary limitations have prevented the employment of full time faculty members in the specialty areas of maternity nursing and in public health nursing); 2) specific factors inherent in the resources made available by the cooperating agencies; 3) course offerings in the physical sciences.

Continuation of the Mental Health Grant

The continuation of this grant for the Integration of Psychiatric Nursing in the Basic Undergraduate Curriculum, for the second year, will enable the faculty to explore further ways and means whereby psychiatric nursing concepts may be integrated throughout the curriculum. Planning has already been initiated regarding areas in which the psychiatric nurse faculty member will

work directly with the clinical nursing faculty. Curriculum revision will make it possible for the psychiatric nursing faculty member to work directly with the class entering September 1957 throughout the entire program.

The course in psychiatric nursing is in the process of revision. During the summer, an Intercollegiate Administrative Committee for Psychiatric Nursing (representative of the three basic collegiate schools of nursing utilizing the resources at the McLean Hospital) was initiated. This committee will 1) make it possible for the schools, as a group, to interpret the educational needs of basic collegiate schools of nursing in the area of psychiatric nursing to responsible personnel at the McLean Hospital; 2) determine ways and means whereby the potentialities of the clinical and human resources may be utilized more fully for educational purposes; 3) work out ways and means whereby the philosophy and purposes of the psychiatric nursing course may be understood by the professional staff responsible for direct patient care; and 4) establish a medium through which planned periodic evaluation conferences will be held. Two meetings of this committee have already been held in preparation for a meeting with the Directors of Medical Service and Nursing Service at the McLean Hospital.

National Accreditation of the School of Nursing

The faculty is in full agreement that every effort should be made to file an application for full accreditation with the National League for Nursing Accrediting Service by the Spring of 1958. (It is the policy of this accrediting service to grant accreditation to a "new program" only after its first class has graduated.)[1] Since the questionnaire for accreditation and other requested materials must be submitted, as per directions, six months prior to the time when the faculty hopes a visit will be made, we shall be working toward a visit in the fall of 1958.

The importance of a full compliment of faculty members, essential for implementing a basic collegiate program of nursing, assumes ever greater dimensions in view of 1) the accomplishment which our faculty has set for itself during this year; 2) the criteria for school evaluation, as identified by the NLN Accrediting Service; and 3) the increasing number of students in the clinical field at various stages of learning.

B. Educational Services for Graduates of Diploma Schools of Nursing

Implications of the Recommendation of the Governor's Commission for the University of Massachusetts School of Nursing

A Special Commission relative to the shortage of nurses in the Commonwealth, authorized under Chapter 115 of the Acts and Resolves of 1956, initiated its activities on November 8 under the chairmanship of Senator Leslie B. Cutler. The report (May 1, 1957) includes two proposals for Nursing Education Legislation, one of which has implications for the University of Massachusetts

1 National League for Nursing, Committee on Careers, Schools of Professional Nursing, 1957, p. 5

School of Nursing:

> "An act to authorize the University of Massachusetts to organize Refresher Courses, and Advanced Courses for Registered and Practical Nurses."

No legislative action at the last session of the General Court has been reported. After a hearing with the chairman of the Committee on Nurse Shortage, Commission on Administration and Finance, the University was directed to develop a proposal and budget. A modest budget of $37,848, approved by the President of the University, for the initiation of nursing education within the intent of the proposed legislation, was submitted to the chairman on June 20, 1957. (See Page 32a)

A proposal was made for a department of Graduate Nurse Education, within the School of Nursing, which would during the initial stages:

1. Make it possible for graduates of approved schools of nursing in Massachusetts to enroll at the University for the purpose of completing the academic and nursing requirements for a baccalaureate degree.
2. Offer job-related work conferences, on a continuing basis to the graduate nurses of the Commonwealth.
3. Provide direct nursing consultation service, upon request, to the nursing staffs of hospitals, schools of nursing, and other agencies within the Commonwealth.
4. Work with the director of nursing in hospitals and other agencies within the Commonwealth in developing refresher courses and Inservice Education for the nursing personnel including practical nurses.

Members of the Governor's Commission, participating in the Study, have gained a broad appreciation of the needs in nursing. There is little question but what their interest will be reflected in the introduction of Nursing Education Legislation in 1957-58.

Directors of Nursing Service in hospitals in Western Massachusetts eagerly await the time when they can be assured of a program for graduates of their schools. Many young graduates are motivated to supplement their nursing education at the State University. Several have felt thwarted and discouraged upon learning that it has not been possible to initiate such a program.

The planning of educational programs in nursing for graduates of diploma schools of nursing will need to be considered from a regional point-of-view. Essentially, it would appear that our concern is in the area of undergraduate nursing education. (Supplemental nursing programs)

The four areas of educational services outlined for the

UNIVERSITY OF MASSACHUSETTS
School of Nursing

BUDGET - Listed in Terms of Priorities
1957-58
Division of Graduate Nurse Education

Instructional Staff: (6)

	Grade	
Associate Professor of Nursing Education "A" (in charge of program)	18	$ 6,812.
Assistant Professor of Public Health Nursing "A"	16	$ 5,889.
Assistant Professor of Mental Hygiene and Psychiatric Nursing "A"	16	$ 5,889.
Instructor:		
Medical & Surgical Nursing "A"	14	$ 5,070.
Maternity Nursing "A"	14	$ 5,070.
Nursing of Children "A"	14	$ 5,070.
TOTAL		$ 33,800.

Secretarial Service: (1)

Junior Clerk and Stenographer	$ 2,548.

Travel and Auto Expense:

Campus to Field Agencies	$ 500.

Library:

Books and Equipment	$ 500.

Equipment and Office Supplies:	$ 500.
GRAND TOTAL	$ 37,848.

MAK/adm
10/57

Chairman, Committee on Nurse Shortage, Commission of Administration and Finance, are consistent with the philosophy of a Land-Grant University and reflect the support of the University Administration.

C. Concluding Statement

The accomplishments of the faculty of the University of Massachusetts School of Nursing, during a brief period of three years reflects, in no small measure, the personal and professional investment of each individual member; and of a group which has worked constructively on the solving of perplexing and difficult problems. It reflects, too, the renewed strength which comes through the continued support of the University Administration, and the members of the Advisory Panel on Nursing Education.

In the year ahead, it is anticipated that the Clinical Associates to the Faculty of the School of Nursing will become more closely identified with the school.

In a program such as ours which utilizes for educational purposes the resources of several cooperating agencies, which are geographically separated from the University campus, challenging problems are ever before the faculty. The realization that the interest, support, and friendship of those who entrusted the faculty with the responsibility of establishing a school of nursing at the University of Massachusetts, has been sustained throughout the years and this fact gives us renewed faith in our accomplishments, and courage and determination to attain our goal.

MAM/adm
10/57

University of Massachusetts
Memorandum

From: Division of Physical Education Date: November 25, 1957

To: President J. Paul Mather

Subject: Material for Annual Report

The material for the annual report as listed below will identify the Division of Physical Education's progress, needs and aspirations.

I. Department of Physical Education for Men

A. Physical Education Major

The conversion of the two part-time positions of last year to two full-time instructorships has placed the Department, for the first time since 1935, in a position to provide adequate instruction in the general program, (consistent with facility limitations); plan toward the expansion of course offerings in the professional curriculum and initiate a program of graduate study in Physical Education.

The anticipated increase in enrollment in the professional major, resulting from publicity throughout the State, did not materialize although applications for admission increased over previous years. Low ~~[illegible]~~ attrition rates, the strengthening of the undergraduate program with attendant publicity, provision of a professional staff of demonstrated competence resulted in a decrease in the total enrollment from 75 to 76.

The cause of the low enrollment and the sharp contrast between the number of students applying for admission and the final number actually admitted to major study, lies in the selective admissions policy of the University.

Ideally, selective admission for major students should be based upon the following prerequisites: Superior mental and physical health; emotional stability with courage to face reality and resolve conflicts; superior intelligence; superior scholarship as revealed by the student's scholastic record; interest in and fondness for children and youth; interest in teaching; personality as evidenced by integration of personal and social habits; ethical and moral character; skill in oral and written expression; social competence and a profound respect for people; adequate scholastic interests and the general capacity to develop the competencies of the profession.

No single qualification should be judged to the exclusion of others for it is the constellation of qualities that is most significant in selective admissions. The final decision as to whether or not a student, who has satisfactorily completed the subjects of preparatory study for admission to the University, is admitted, should not be left to one person. This is particularly true when the person responsible for this decision is, or is not, cognizant of the qualities necessary for competence in the field but must base his decisions, because of tradition, solely upon academic test scores.

Among the objective appraisal procedures in current use in other professional schools are: valid tests of competence in communicative skills, intelligence and ability in such areas as mathematics, current affairs and social studies, standard aptitude tests; grade point averages and rank in class. Equal consideration is given to such items as participation in interscholastic and intramural sports, letters and other awards earned, number and kind of activities engaged in during leisure time, physical and skills tests. In addition, a number of subjective evaluations provide data in appraising students. Among these are qualitative judgments and recommendations of the principal and superintendent, physical education teacher, counselors and alumni, personal interviews with professional staff, interest inventories, observations of students working with children, etc.

Neither objective nor subjective techniques alone should be the basis of judging an individual's qualifications. A wholesome combination is essential in that no criteria have been developed to significantly predetermine the fitness of a student to satisfactorily complete any undergraduate program.

Lack of consideration of these basic essentials in selective admission in physical education has resulted in the low enrollment of majors this year. The fact that outstanding potential majors, residents of the State, were refused admission to the University this fall and are currently enrolled in other professional schools of physical education cannot be passed off by the assumption that the admission standards of these reputable schools are lower than ours. There is evidence that these students were accepted on the basis of their over-all qualifications for competency in the field and that these institutions do consider the potentials of the students in light of the above qualifications and do not base selective admission solely on academic test scores.

No plea is made for Department autonomy on the admission of major students. The urgent need is for cooperative selection between the admissions office and the Department. This is necessary not only to insure

that applicants possessing the qualifications of the profession are given serious joint consideration for admission, but also to insure that those not possessing the necessary qualifications, other than scholarship, are not admitted to the major area of study.

The acceptance of students for admission to undergraduate study with the understanding that they must major in physical education, (because of a questionable academic record) although their education interests are in other professional areas, is indefensible.

This is particularly true when (1) by such policy students possessing the broad qualifications desired by the Department are refused admission and four years hence compete for placement opportunities with our own graduates, as graduates of other reputable and established professional schools; (2) by the simple procedure of approval of 'change of major' by the students physical education advisor, the displaced student can administratively find his way to his initial field of major interest even though the status upon which he was originally refused admission is unchanged.

The important current problem, other than facility limitations, confronting the Department, is enrollment. The solution is the establishment of an annual quota for physical education majors. Consistent with physical facility limitations this quota cannot exceed 40 students per year.

In consideration of the above suggested statement of administrative procedures, students would be accepted for admission to the physical education major on consideration of a representative screening committe, organized for this purpose, and on which the Department would have representation. Such a procedure would not necessarily insure filling the quota but it would place the Department in a position to recruit qualified students with some assurance that through joint screening their chances for admission would be enhanced; that notification of acceptance or rejection would be expedited and that better public relations between the University and school administrators, teachers, alumni, parents and subsequent prospective major students would be established.

B. The Practice Teaching Program

A departmental committee responsible for the physical education practice teaching program, in cooperation with the School of Education was established in September 1957.

In order to meet the needs of the expanding physical education major program, it was necessary to increase the number of schools cooperating

with the physical education practice teaching program from six to fourteen within the past year. A definite improvement in the program was made by assigning each practice teacher to a cooperating school on a full time basis for a period of nine and one half weeks. In making practice teaching assignments consideration was given to the following:

1. Primary opportunity for teaching physical education at the elementary and secondary school level with equal emphasis on the minor area of study if the opportunity for such teaching was available.

2. Reserving assignments to cooperating schools within reasonable commuting distance of Amherst for those students enrolled in advanced military and who participated in fall varsity athletics.

3. Requests for practice teachers as potential candidates for permanent positions in cooperating schools.

4. The need for extending the area of assignment to the eastern part of the state to meet present and future placement competition from Boston University and Northeastern University.

Personal visits were made to each cooperating school system (selected by the board), to arrange for the placement of practice teachers. A complete profile on each student assigned was given to the administrative officials and guide teachers in each of the cooperating school systems. The profiles included information as to courses taken, number of credits earned, athletic and extra curricular participation, and personal data. Prior to the beginning of practice teaching, each student met with his critic teacher and administrative officials of the school to which he was assigned to arrange tentative teaching schedules. Each student will be observed by a board member a minimum of three times during the nine and one-half weeks of practice teaching.

The following is a summary of the placement of physical education practice teachers in the school systems of Massachusetts for the academic year 1957-1958:

School System	Number of Students Assigned
Amherst	3
Agawam	3
Avon	1
Bedford	1
Boston	1
Deerfield	2
Holyoke	3
Lexington	1
Ludlow	2
South Hadley	1
Wilbraham	1
Wilmington	1
Winthrop	1

C. Physical Education Activity Program

During the fall semester of 1957-58, there were 964 students, excluding veterans, enrolled in Physical Education 3 and 33.

The Rogers' Physical Fitness Index Test was again administered to all incoming freshman male students with the exception of veterans and those who were excused by the University physician. Data gained from the testing program has made possible the initiation of a program of activities designed to meet the needs of individual students. The mean score for our freshman men was 92. Although the score is slightly below the national average, it is significantly higher than the score attained by last year's group.

The adaptive program of physical education in which 46 students are enrolled is being given sound professional direction in close cooperation with the University physician, by one of our recently appointed staff members, Robert James.

It is significant to note that included in this program is a freshman paraplegic who, during the outdoor program, participated in archery classes from his wheelchair and who is presently enrolled in bowling. He will be assigned to swimming classes during the second semester.

Except for minor changes in course offerings made necessary by lack of facilities, the activity offerings remain relatively unchanged from the previous year.

II. Department of Physical Education for Women

The college year 1957-58 will be remembered by the Women's Physical Education staff for the frantic struggle to cope with the dismal, frustrating present and the ambitious, optimistic preparation for the promising future.

The delay in the completion of the new building which was scheduled for November, 1957, and the eviction from the Drill Hall in June, 1957, to make way for the new Liberal Arts Building, have necessitated a makeshift program. Classes are scheduled in eleven different buildings on campus of which only one was planned for physical education activities. It has been necessary to cut the class meetings for sophomores from three times a week to two for this year only. During the winter season the content of the sophomore classes has been changed. First Aid, Home Nursing and Camp Counseling have been substituted for some of the usual activities which cannot be carried on in classrooms.

The women's athletic program is sharply curtailed, not only by the loss of the Drill Hall, but because of a considerable decrease in the allotment from the Athletic Trust Fund. This is most unfortunate in a year of increased enrollment and consequent increased participation.

The hockey season, under the leadership of Miss Maida Riggs, was unusually successful. Forty-three girls participated in the program which consisted of inter-class games, three games at other colleges and one invitation game at home. Two members of the Welsh Touring Team were guests at the University for two days. They added zest to the season by coaching both the extra curricular group and the hockey classes. Many of the student hockey players witnessed the game between the Welsh Touring Team and the Hampshire Hockey Club at Smith College.

The Naiads were delayed in starting their program by the repairs on the swimming pool. Thirty students were elected from the forty-two who took the tests, and are now well on the way to make the winter production. Two members of the group accompanied by Miss Esther Wallace attended the annual conference of the Association of Synchronized Swimming for College Women at Vassar College. Miss Wallace and one of the students led discussion groups at the meeting. From twelve to sixteen freshmen will be selected from the thirty girls who are trying out for the Junior Naiads.

Besides the regular dance group of twenty students, there is an enthusiastic freshman dance group of twenty-five members. Early in the

season, Miss Georgia Reed, the leader of the group took six dancers to the University of Connecticut to take part in a master lesson in dancing taught by Alwin Nickolais. The two dance groups will present a program to the university and the public early in March.

The schedules in basketball, badminton and volleyball are practically eliminated this year for want of gymnasium space. The only opportunity for play at home will be in the Cage from 12 to 1 P. M., daily. Unfortunately only a small percentage of the interested students will be free at that time.

A greater increase in interest and participation is inevitable in the fall of 1955 when the new building will be ready. Also in the near future, it will be desirable to invite other colleges here for matches, clinics and symposiums. For too long, we have been unable to do this for lack of facilities. A decided increase in the allotment of funds will be essential to insure this enriched program.

It is our hope that September 1955 will also mark the beginning of a major course in physical education for women. The staff has been working on a proposed curriculum after a long period of study of other college curricula. The present aim is to have a broad preparation for teachers of physical education for elementary and secondary schools. At a later date when the demand warrants the curriculum can be expanded to include specializing in the various fields of physical education.

As soon as the curriculum is established the staff will turn its attention to producing a publicity folder to send to the secondary schools of the Commonwealth. Eleven girls presented themselves for interviews at the fall High School Day and several inquiries have been received since by mail.

I wish to pay tribute to the staff for their loyalty, their enthusiasm and their tremendous effort to make this difficult year a success. However, not all of the credit for whatever success is attained should go to them. The students have cooperated in every way possible. They laugh off the inconveniences and take part in the events with even more than normal interest and wholeheartedness. It seems as though the whole university gives moral support, but especial praise and gratitude should go to the staff of Memorial Hall and the Music Department, to the University maintenance staff, and to the women students, the heads of residence, and the maintenance staff of the women's dormitories where so many classes are held. Without the cooperation of these people, we could have had no program this year.

III. Department of Recreation Leadership

In the annual report of the division one year ago the following description of the difficulties besetting the Department of Recreation Leadership was presented:

. The breadth of subject matter required in an adequate recreation curriculum, exclusive of what can be satisfactorily provided by other departments, is beyond the experience and ability of one person. The curriculum offers either an inadequate number of courses, or more courses inadequately taught. In either case, only a few students elect to major in it. With a small number of majors, the department finds it extremely difficult to induce other departments to offer specialized, supporting courses, although they may be fully qualified and desirous of doing so. Without these supporting courses, particularly in the various program skills (music, dramatics, and the like), the curriculum is yet weaker. Graduating majors cannot compete successfully for the more desirable professional positions. Without a successful placement record, such a department does not attract an increasing number of high quality students and is unable to justify additional faculty by reference to number of majors.

The situation remains unchanged. At this writing, the factors of curriculum, faculty, and enrollment are still deficient. However, progress has been made during the past year as follows:

A. A revised curriculum proposal is now awaiting administrative approval. The new curriculum compares favorably with the best in other institutions. Inasmuch as it represents the first step in the attack upon the complex of inter-related problems, great care and thought have gone into its design and great importance is attached to its establishment.

B. Informational and interpretive materials have been prepared and limited distribution has been made through various channels. Inquiries resulting from the distributions cannot be satisfactorily answered (e.g. for comparison with Springfield College, until the revised curriculum has been approved.)

C. Interdepartmental cooperation regarding curricular matters continues to be good. Several departments offer courses in subjects which concern recreation, but the courses are oriented to other needs (e.g. teacher training).

These departments recognize the resulting weakness for recreation majors and are desirous of offering specialized courses for recreation majors as soon as enrollment in the major increases sufficiently to justify the additional faculty time.

D. The need and search of municipal officials in Massachusetts for technical information and consultative services in matters pertaining to municipal recreation efforts continue to increase. The University has great potential for meeting this need, and many departments on campus now help to meet it in specialized fields. During the past year groundwork has been laid with these departments for an organized effort in this regard.

E. An urgent need of municipal officials in Massachusetts is a compilation and analysis of the laws concerning public recreation. Preliminary investigation has been undertaken by this department and by Mr. Edward Shea of the Division. As a result of discussions extending over the past years the Bureau of Government Research is about to devote intensive effort to this project and to see it through to publication.

F. Toilet facilities have been provided at the Mount Toby Recreation Area. Attempts thus far have been unsuccessful in eliminating pollution of the spring water. The state department of public health is assisting the department in this project. These facilities are needed for the camping experience in the Camp Counseling course.

The primary concern of the department remains the approval of the revised curriculum. When this has been accomplished, there will still be the need for additional faculty. An adequate course of study on paper is not a reality until it is translated into faculty and students. There are ten majors at the time of writing.

The needs of the Department of Recreation Leadership continue to be

A. Approval of the professional curriculum.

B. Additional instructional personnel.

C. Appropriate operating expenses.

IV. Departments of Athletics

A. Varsity and Freshman Athletics

At the present time, sixteen athletic teams are sponsored by the University in competitive intercollegiate sports. All have squads at the freshman level except Pistol, Gymnastics, Ski and Wrestling. Our program of competitive sports is more inclusive than any maintained by the other New England Land Grant Colleges and somewhat less inclusive than schedules carried by the larger Liberal Arts Colleges of New England.

The list of competitive sport teams, including the number of participants, for the year of 1956-57 is as follows:

Baseball	56
Basketball	40
Cross Country	36
Football	76
Golf	10
Gymnastics	20
Hockey	60
Lacrosse	56
Pistol	12
Rifle	10
Soccer	70
Ski	6
Swimming	40
Tennis	40
Track	75
Wrestling	25
	674

Gymnastics, the most recent addition in the field of competitive intercollegiate activity has grown rapidly, and with enthusiasm, under the capable direction of James Bosco. Last year's activities were climaxed by the successful sponsoring, at the Hicks' Physical Education Building of the New England Senior Men and Women A.A.U. Championships. This was witnessed by a large audience from all sections of New England.

A welcome addition to our athletic facilities during the year was the renovation of Room 11 of the Hicks' Building which resulted in a visiting team room, with new lockers and showers, in the new section of the above room.

During the indoor season, our play and practice area is very limited. The intramural program is forced to operate late at night. The need for a new men's gymnasium is very apparent.

The Athletic Department is making every effort, insofar as possible, to continue the present policy of offering a diversified program of intercollegiate competition which we believe is desired by the students at the University, from a spectator viewpoint and that of actual participation. We believe our efforts are justified because of actual participation in the youth movement in which President Eisenhower is so vitally interested.

During the past year the most notable team results were: (1) the Tennis Team won the Yankee Conference for the fourth time in the last six years, and (2) the Baseball Team won the Yankee Conference for 1957.

Outstanding individual achievements were: (1) William Young, class of 1960 won the New England Intercollegiate Golf Championship and competed in the N.C.A.A. Tournament, and (2) Heinz Breigel through A.A.U. meets was recognized as the Senior Champion A.A.U. Gymnast in New England.

B. Stockbridge School Varsity Athletics

Personnel in the Department of Athletics assist in the athletic program, which includes football, basketball and informal track. Forty-seven reported for football, 54 for basketball and [illegible] for track. It is expected that a large group will take part in the swimming program that is being inaugurated this winter. Junior colleges and preparatory schools in New England are on their schedules. Unfortunately early placement of Stockbridge students interferes with an organized spring program.

C. Intramurals

After having increased substantially over the past two or three years, intramural activity has started to level off on a more or less stable plane. Organizational difficulty that arises with the formation of many leagues in a single sport has been resolved this fall when the touch football program was set up for only two leagues of 14 teams each. This has proved highly satisfactory in scheduling, spirit of competition, and in regularion of the play. Play in the football program was started earlier this year and as a result the program has

run more smoothly right on through the championship playoffs with less last minute hasty planning than in past years.

The agreement of competition between the University and the University of New Hampshire that was formulated last year has increased the competitive spirit within the intramural program here. Under the home and home bowl game set up, the University-wide champions traveled to New Hampshire under IFC sponsorship and played the UNH intramural champions on November 17, the evening before the University of Massachusetts-University of New Hampshire varsity football game. The champions also played a two game home and home set with the Westover AFB touch football team, the first game being played here on November 19, and the second contest at Westover on November 21. A similar bowl game will be played with New Hampshire on the basketball court. Last year the game was played here and this year when the varsity team plays at UNH the intramural champions will play there at the same time.

The total team and player participation in the intramural program for the 1956-57 academic year is as follows:

	Total Teams	Total Games	Total Participation
Football	32	294	450
Basketball	44	226	525
Softball	42	196	630
			1605

Tentative plans are underway to organize tournaments in tennis, volleyball and possibly golf. Also under advisement is the possibility of organizing some bowling leagues to supplement the IFC sponsored fraternity league.

Increasing the scope of the intramural program becomes more difficult as the facilities do not increase with the demand. Football, basketball, and softball have to be considered as having reached a more or less permanently stable condition now due to lack of additional playing areas and other facilities. More activity is planned in other sports, however, to compensate for the restricted growth of the three major programs.

V. Research

Plans are now being considered to convert a Varsity Team room for dual laboratory use in research in Tests and Measurements, and for Adaptive Physical Education. Our laboratories will now be two in number. The present improvised laboratory will be set aside for such courses in the biological sciences as Human Anatomy, Physiology of Exercise, and Kinesiology.

Several research projects, one involving a study of the comparative strengths of knees of varsity football players, will be undertaken during the second semester by students enrolled in the course in Tests and Measurements.

Plans for an expanded testing service will soon be completed wherein the Department may be of service to the school systems within the Commonwealth to administer strength, cardio-vascular or cardio-respiratory endurance, motor ability, and skill knowledge tests currently in use in physical education.

VI. Division of Physical Education - Personnel Briefs

Miss Vickery Hibbard is on leave of absence during the current year, working on an advanced degree at the University of Southern California.

Miss Nancy Rupp is the new member of the Department of Physical Education for Women.

The new men identified with the Department of Physical Education for Men are: David Bischoff, Justin Cobb, and Robert James. In the case of Mr. Cobb, he is doing collateral duty as assistant track coach; Mr. James is assistant gymnastics coach.

Mr. Bischoff is supervisor of the practice teaching program.

Mr. Noel Reebenacker is in the Department of Athletics and is the head freshman football coach and supervisor of the intramural program.

VII. Summation

The Division of Physical Education in preparing this year's material for the annual report decided that it might be desirable to be more specific in developing progress during the past year and indicating needs necessary in accomplishing our objectives for further development of the total program.

In recapitulating our current needs, an effort will be made to list them as follows:

A. Department of Physical Education for Men

1. Establishment of quota for majors and development of a procedure between the Dean of Admissions Office and the department in question, in an effort to increase the number of students identified with physical education in the 1962 class.

2. Increase in current appropriations, particularly 10 account so that the department may fulfill its obligation in the practice teaching program to the students and the participating schools located throughout our Commonwealth.

3. Indoor physical education facilities

B. Department of Physical Education for Women

1. Additional personnel for the 1958-59 school year, in anticipation of occupying a new building and supporting an expanding service program and professional program for both freshman and sophomore physical education majors.

C. Department of Recreation Leadership

1. Approval of the professional curriculum
2. Additional instructional personnel (one), in anticipation of new professional curriculum
3. Appropriate operating expenses

D. Department of Athletics

1. Additional coaching personnel for varsity football (2) The personnel will assume collateral duties in other sports programs

2. Full-time director of intramurals

3. Additional indoor athletic facilities.

WPM:B Signed: _____
Warren P. McGuire
Head of Division

President J. Paul Mather

Sir, I beg leave herewith to present my second annual report of the School of Education.

The School of Education just ten weeks ago observed its first birthday. Our School, therefore, has had its beginning in a period of great activity and of great challenge in the field of Teacher Education. I wish briefly to discuss some of these challenges and our plans for meeting them.

The Challenge of Numbers. The need for many more teachers for our elementary and secondary schools has been described so often there is no need for repetition here. It is enough to say that the need will require the utmost effort of all Teacher Education programs to even approach the necessary supply of teachers for many years to come. Our School is planning for greatly increased effort in providing more good teachers. The enrollment figures for elementary and secondary education seniors in the practice-teaching block for various years are as follows:

Year	Elementary	Secondary	Total
1953-54	36	52	88
1954-55	48	48	96
1955-56	74	54	128
1956-57	85	63	148
1957-58	80	75	155
1958-59 (projected)	92	93	185
- - - - - - - - - -			
1964-65 (projected)	225	225	450

This year our enrollment of seniors continues near its lowest point in conformance with the over-all University enrollment picture. Next year we expect our enrollment to start the rise which will take it to the projected figure of four hundred fifty seniors by 1964-65.

To meet this challenge of numbers the Dean has prepared for the Provost a projected staff picture which lists the staff needs of the School through 1964-65. The

needs are broken down into yearly requests which build up to a total staff of twenty-six members by September 1964. It is hoped the requested positions will continue to be forthcoming so that continuity can be maintained in program planning.

The staff is also planning for our new School of Education building. This year the School was granted $92000 for the architect's final working plans and the staff is reviewing the preliminary plans preparatory to entering the final stages. The request for funds to build the new building has been given first priority on the Capital Outlay requests of the University which will go before the Legislature in the spring. There is hope that the School will be in its new quarters by 1960. This is very necessary because we are already crowded in our quarters in Machmer Hall and we will have difficulty finding office space for new staff members next fall. Our new building is designed to be of maximum effectiveness for the staff and enrollment projected for 1964-65.

The Challenge of Quality of Staff. The recruitment of all University staff will become increasingly difficult in the years ahead but particularly so in the field of Education. Our criteria for selection of new staff include the usual advanced degrees and, what is even more important, public school teaching experience. The possession of a Doctor's degree and several years successful teaching experience means that the person is already making considerably more than our beginning assistant-professors. Only the use of the flexibility of the Freedom Bill enabled us to procure the services of three excellent staff prospects for this year. We anticipate even more difficulty in the years ahead. This difficulty points to the desirability of obtaining a small nucleus of eight or ten excellent staff members who will be advanced in rank with sufficient rapidity that they will see a permanent career possibility here. Around these will revolve a larger number of staff at the lower ranks who will be more or less transients as they manoeuvre for position on

the educational ladder. The requested annual promotions on our projected staff picture are designed to obtain this permanent corps of career people.

Even more important, perhaps, are the plans now in the process of development to give the staff more opportunities for participation in planning future policies. Already the staff has participated in the preparation of several policy statements. We are also in the process of developing within the School a Dean's Advisory Council and a Research Council. We feel that such participation will serve to bring out the best in our staff, to develop the best policy for the School, and to hold the morale of the staff at its present high level as we increase in size.

The Challenge of Quality in Program. Our youthfulness as a School of Education, and even the delay in entering our new building, may act to our advantage in program development in that it will enable us to consolidate our gains from the past and to plan carefully our programs for the future. In my last report I mentioned tentative beginnings in the direction of greater University cooperation in the Teacher Training program. These beginnings are being expanded and strengthened. The Department of English and History have made considerable strides in this cooperation and Mathematics and Zoology are planning on helping next year. Our staff is re-evaluating our total program, utilizing in part the students who have just finished the program, to correct any weaknesses and to consolidate any strengths.

Our plans for new programs in our new laboratory school are proceeding in an encouraging fashion. The new reading clinic, the new diagnostic clinic, the program for gifted children, the proposed growth studies and other research, and the contemplated improvement in the training of administrative and supervisory personnel, will all be ready to be put into operation when the new building is opened. We feel our program should be second to none and we are planning to make it so.

One new program will be initiated on a trial basis next summer. During the ten week Summer School a program is being prepared for liberal arts and science graduates who wish to prepare for teaching. Four of our regular training courses will be available during the Summer School and provisions will be made for practice-teaching during the first eight weeks of the fall term which follows. Thus the student will be able to meet certification requirements for teaching in Massachusetts and several other states by November first. This program should be particularly appealing to married women who will be able to gain certification by being absent from home only ten weeks in summer since practice-teaching in many cases can be done in the students' own home town.

Personnel Changes Since January 1, 1957

Death:

William M. Rourke, Assistant Professor of Education since 1945.

Promotions:

Helen F. O'Leary to Associate Professor.

Appointments:

Dr. Albert Anthony to Associate Professor to teach Secondary School Methods and to supervise practice teaching.

Dr. Elmer Lawson to Assistant Professor to teach History of Education and to supervise practice teaching.

Dr. Vincent Rogers to Assistant Professor to teach Elementary School Curriculum and to supervise practice teaching.

Mr. Robert Wyllie to Assistant Professor to teach Secondary School Curriculum and to supervise practice teaching.

Immediate Needs of the School.

(1) Three new positions on the assistant professor level in the fields of History of Education, Secondary Methods and Curriculum, and Guidance and Testing.

(2) The promotion of Dr. Raymond Wyman to Professor of Education to teach Audio-Visual Education full time for the School.

(3) Considerably more travel money to enable the Staff to supervise more adequately the practice teachers and to enable the School to go farther from campus in the placement of the students. This need becomes more and more pressing as our staff increases and as our off-campus responsibilities increase.

(4) Considerably more funds in library and laboratory for the purchase of books and teaching supplies. Our library is still very deficient in many areas due to our late start as a School. Our teacher trainees should be familiar with the latest and best in school textbooks, workbooks, resource material, and equipment before they go out to teach. We made some progress this year but we still have far to go to reach adequacy.

Sir, in presenting this report may I say that I feel the School of Education is moving ahead in a sound manner to meet the above challenges and that in this progress the youthfulness of the School may prove a strength rather than a handicap. Already the Staff is rising to the challenges and participating energetically and effectively in the development of plans and policies in preparation for the coming years of greatly increased opportunities and responsibilities. I wish to commend them for their fine work.

Albert W. Purvis

ANNUAL REPORT - REGISTRAR'S OFFICE - DECEMBER 1, 1957

The Registrar's Office performs the three undergraduate services of Admissions, Registration, and Records.

A. ADMISSIONS

a. Admissions data for September 1957 (college year 1957-58) and trends.

1. Applications requested and mailed out (in-state freshmen only).

	Men	Women	Total
Sept. 1954	3,228	1,528	4,756
Sept. 1955	3,746	1,604	5,350
Sept. 1956	4,251	1,889	6,140
Sept. 1957	4,407	2,464	6,871

These figures represent applications mailed out in response to mail requests. In addition, in 1957 over 1,000 applications were given out over the counter or during interviews. We had about 3,000 requests from out-of-state students for catalogues and applications. No catalogues or applications were issued to these, for we did not accept any out-of-state students.

2. Applications returned (freshman in-state students only).

	Men	Women	Total
Sept. 1954	2,321	960	3,281
Sept. 1955	2,730	947	3,677
Sept. 1956	2,748	1,264	4,012
Sept. 1957	3,021	1,717	4,738

No applications were accepted from out-of-state students.

3. Students accepted (freshman).

	Men	Women	Total
Sept. 1954	810	372	1,182
Sept. 1955	698	390	1,088
Sept. 1956	723	425	1,148
Sept. 1957	730	536	1,266

4. Transfers

	Applications Returned		Accepted	
Sept. 1956	534		81	
	Men	Women	Men	Women
Sept. 1957	506	92	62	1

	Men	Women
5. Former students who re-entered	78	6

6. Correspondence data.

One way to measure interest in our program is through the number of letters sent out in each calendar year.

Year	Number of Letters
1951	19,913
1952	23,292
1953	24,211
1954	26,410
1955	27,749
1956	30,108

7a. Comparison of Scholastic Aptitude (A. C. E.) of class of 1960 with that of four preceding classes. The table may be read as follows: the number of right answers required to place a student at the 50 percentile point in the class of 1960 would have placed him higher than the 67% of the class of 1959 or higher than 75% of the class of 1956.

Selected Percentile Ranks and Equivalent Raw Scores on the Total ACE* for the class of 1960 and the Equivalent Percentile Ranks of These Scores for Four Preceding Classes.

Class of 1960 Percentile	Raw Score	Class of 1959 Percentiles	Class of 1958 Percentiles	Class of 1957 Percentiles	Class of 1956 Percentiles
10	(97-98)	15	18	15	19
25	(110-111)	38	40	35	43
50	(124-125)	67	68	68	75
75	(135-136)	85	86	85	89
90	(147-148)	96	96	96	97

*A.C.E. Psychological Examination for College Freshmen 1952 Edition administered to 850 students of the class of 1960 - students observing the religious holiday were excused from this test as were some veterans.

7b. Comparison of the Scholastic Aptitude (College Qualification Test) of class of 1961 and class of 1960. The class of 1960 was the first class to be given this test and the last class to be

given the A. C. E. The results indicate that in general the performances of 1961 were quite similar to 1960. For example, 55 right answers on the Verbal placed a student at the 48th percentile of the class of 1960 and the 51st percentile of the class of 1961.

C.Q.T. RAW SCORES	PERCENTILE RANKS			
	CLASS	CLASS	General College	Freshmen In State
VERBAL	1960	1961	Freshmen	Universities
67	88	90	90	93
55	48	51	70	70
37	07	10	28	28
NUMERICAL				
45	87	89	94	91
35	43	49	73	70
22	07	09	35	30
INFORMATION				
60	89	89	93	90
48	44	51	63	60
32	03	10	13	13

8. The applicants for admission for the Class of 1961 were for the most part born in 1939 and 1940. The Class of 1962, now being selected, will be largely made up of the babies of 1940 and 1941. The following table indicates the birth rate trend in this period.

Year of Birth	Number	Date of Entering College
1939	62,575	Sept. 1957
1940	65,369	Sept. 1958
1941	70,228	Sept. 1959
1942	83,371	Sept. 1960
1943	85,743	Sept. 1961

b. Admissions data for Spring Semester College Year 1956-57.

	Men	Women	Total
New Freshmen, practically all veterans	86	1	87
Transfers	46	2	48
Former Students Returning	85	7	92
Total	217	10	227

Apparently we are headed toward the admission of a rather large number of new students three times in the year, September, January and June. The problem of curriculum for such students needs more careful attention. There is also a problem of counseling. The old significance of class is

becoming less and less important, for we will be entering students three times a year, providing means of acceleration and graduating them three times a year. The only significant dates will be those of entry and graduation.

B. REGISTRATION

a. Registration and Enrolment Trends, September 1957.

1. Undergraduate Registration, September 1957

Class	Men	Women	Total
1958	610	220	830
1959	625	254	879
1960	685	331	1,016
1961	730	536	1,266
Totals	2,650	1,341	3,991
Specials	11	28	39

2. Registration in Interchange of Students Program, Amherst, Mount Holyoke, Smith and University of Massachusetts cooperating, September 1957.

a. Students from Cooperating Colleges

From	Number of Students	Courses Elected	No. of Students in Courses
Mt. Holyoke College	6 (a)	Chemistry 211	6
Amherst College	2 (b)	Botany 51	1
		Botany 77	1
		Air Science 75	1

(a) One student is an instructor
(b) One student is taking the two courses in Botany

NOTE: Five Amherst College students are also taking Russian at the University, but under an instructor at both Amherst and the University.

b. University Students Enroled in Cooperating Colleges

At	Number of Students	Courses Elected	No. of Students in Courses
Smith College	4 (a)	Russian 23	1
		Russian 31	4
		Russian 35a	1
Amherst College	1	Dramatic Arts 43	1
		Dramatic Arts 79	1

(a) One student is taking Russian 23, 31, and 35a.

3. Enrolment Trends - Total Undergraduates

Year	Men	Women	Total
1950	1,981	770	2,751
1951	1,934	1,021	2,955
1952	2,032	1,164	3,196
1953	2,267	1,220	3,487
1954	2,479	1,224	3,703
1955	2,459	1,169	3,628
1956	2,581	1,212	3,793
1957	2,650	1,341	3,991

4. Enrolment Trends - Freshman Men and Women

Class	Men	Women	Total
1954	539	308	847
1955	639	406	1,045
1956	669	407	1,076
1957	754	416	1,170
1958	810	372	1,182
1959	698	390	1,088
1960	723	425	1,148
1961	730	536	1,266

5. Enrolment Trends - Freshman Enrolment by Schools

Class	Arts and Science	Engin.	Bus. Adm.	Agriculture	Home Econ.	Phys. Educ.	Nursing
1954	422	77	107	118	99	24	
1955	540	157	130	91	103	24	
1956	522	213	115	99	102	25	
1957	577	277	146	83	64	23	
1958	543	314	148	98	55	24	
1959	519	295	93	86	52	20	23
1960	588	309	107	61	40	18	25
1961	607	309	116	55	45	23	21

b. Undergraduate Registration Spring Semester 1956-57

Class	Men	Women	Total
1957	574	244	818
1958	570	229	799
1959	642	283	925
1960	737	406	1,143
1961	95	1	96
Totals	2,618	1,163	3,781
Specials	21	33	54

c. Registration Summer Session 1957

Session Number		Course Registration	Individual Students
1	June 3	128	128
2	June 10	142	142
3	June 17	16	16
4	June 24	74	74
5	July 1	982	509
6	July 15	15	15
7	July 29	14	14
8	August 5	7	7
9	August 19	70	70
	Totals	1,448	975

C. RECORDS

a. Academic Dismissals College Year 1956-57

Class	February	June	Total
1957	4		4
1958	10	24	34
1959	26	30	56
1960	20	124	144
1961		4	4
Total	60	182	242

The enrolment in the Class of 1960 in September 1956 was 1,148. Of that number, 12.5 per cent were dropped for academic reasons during the freshman year.

Conditions of Academic Dismissal College Year 1956-57

a. Class of 1957.

1. A student who did not pass in at least 60 per cent of his semester credits in any semester was dismissed.

b. Class of 1958.

1. January. Dismissal if the cumulative average was below 1.4 except that a student was not dismissed if his average for the current semester was 1.6 or higher.

2. June. Dismissal if cumulative average was below 1.6 except that the student was not dismissed if the average for the current semester was 1.6 or higher.

c. Class of 1959

1. January. Dismissal if the cumulative average was below 1.4 except that a student was not dismissed if the average for the current semester was 1.4 or higher.

2. June. Dismissal if the cumulative average was below 1.5 except that a student was not dismissed if his average for the current semester was 1.6 or higher.

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c. Class of 1959

1. January. Dismissal if the cumulative average was below 1.4 except that a student was not dismissed if the average for the current semester was 1.4 or higher.

2. June. Dismissal if the cumulative average was below 1.5 except that a student was not dismissed if his average for the current semester was 1.6 or higher.

d. Class of 1960.

1. January. Dismissal if three academic courses with a combined aggregate of eight or more semester hours were failed unless a grade of C was made in each of the other academic subjects.

2. June. Dismissal if the cumulative average was below 1.4 except that the student was not dismissed if his average for the current semester was 1.5 or higher.

e. Class of 1961.

1. June. Same as Class of 1960 for January.

b. Summary of Withdrawals College Year 1956-57

1st Semester

1. Withdrawals during the Semester

Class	Men	Women	Total	Grand Total
1957	4	3	7	
1958	15	4	19	
1959	15	10	25	
1960	18	11	29	80

2. Academic Dismissals	60
3. Withdrew at end of Semester	30
4. Did not register for the Second Semester	46
Total Withdrawals for First Semester	216

2nd Semester

1. Withdrawals during the Semester

Class	Men	Women	Total	Grand Total
1957	1		1	
1958	4	2	6	
1959	12	1	13	
1960	18	6	24	44

2. Academic Dismissals	182
3. Withdrew at end of Semester or before Fall Registration	103
Total Withdrawals for Second Semester	329
Total Withdrawals for College Year 1956-57	545

Per cent of withdrawals based upon the fall enrolment of 3,793 undergraduates is 14.3%.

b. Bachelors Degrees Awarded 1957. Students who received the degree in the calendar year 1957 graduated as of the Class of 1957.

School	February	June	September	Total
Arts and Science	16	348	27	391
Agriculture	11	64	3	78
Business	8	130	9	147
Engineering	10	105	7	122
Home Economics	None	39	None	39
Physical Education	1	16	None	17
Total	46	702	46	794

These figures should be compared with the original enrolment in this class when it entered in September 1953. See a5 under Registration. In interpreting the results it should be noted that there have been additions to this class as well as withdrawals. Some have also been demoted to a lower class.

c. Transcripts of Record Issued.

Year	Number of Undergraduate Transcripts
July 1952 - July 1953	2,726
July 1953 - July 1954	3,104
July 1954 - July 1955	3,459
July 1955 - July 1956	*4,828
July 1956 - July 1957	4,648

*This figure included graduate school transcripts also.

M. O. Lanphear
Registrar

ANNUAL REPORT OF THE PLACEMENT SERVICE

To the President of the University of Massachusetts

Sir:

I herewith respectfully submit a report of the various activities of the Placement Service for the college year 1956-1957.

An increased interest in the graduates of the University was evident by the many invitations extended to the placement officers to personally visit companies at their expense to get a first-hand look at the job opportunities available for our young men and women, to size up the type of people they would be working with, the over-all surroundings, to become better acquainted with the employment personnel for a better understanding of mutual problems and to provide for a smoother relationship that obviously results therefrom. Such visits were made to Bethlehem Steel Company, John Hancock Life Insurance Company, Remington Rand, Factory Insurance Association, Bell Telephone Laboratories, New England Telephone Company, State Mutual Life Assurance Company, New Departure Division of General Motors Corporation, Chrysler Corporation, and Motorola, Inc. These trips have been most helpful in terms of counseling students relative to the particular training programs and job opportunities thereat.

The placement officers continued to discuss placement opportunities and to counsel individual seniors along career lines to the majority of individuals in the senior class. This is obviously going to become increasingly difficult to continue due to the larger numbers in the classes coming along. More group meetings were held during the past year and it will become necessary to foster more such meetings in order to cover all of the students.

The interest in graduates of the class of 1957 was about on a par with that of the class of 1956 with the demand remaining about the same -- engineers being first followed by physical science majors, teachers, business administration graduates, agricultural personnel, and the liberal arts major being sought after more in terms of personality

than with regard to particular training.

Salaries rose slightly again last year. The salaries for the 1957 men graduates were as follows:

SALARIES FOR 1957 MEN GRADUATES

Engineers	$374 to $600 per month, an average of $473
Chemists, Physicists, Mathematicians	$390 to $475 per month, an average of $443
Accountants	$302 to $420 per month, an average of $376
Sales	$300 to $433 per month, an average of $367
Agriculture on Farms	$200 to $250 plus maintenance per month
Agriculture in Industry	$325 to $375 per month, an average of $350
Business	$300 to $471 per month, an average of $373
Teachers	$370 average per month (based on 10-month year)
Miscellaneous	$330 to $455 per month, an average of $381

The number of companies, schools and services sending representatives to visit the campus for the purpose of interviewing seniors and graduate students for job opportunities grew to 255 companies with 38 companies cancelling their scheduled recruiting dates due to a lack of interest on the part of students in their particular company. Interest on the part of seniors is evident by the fact that the number of interviews conducted almost doubled the figure of the previous year since 5009 interviews were conducted this year.

The statistics concerning the employment of the graduates of June, 1957, are as follows:

OCCUPATIONAL ACTIVITIES OF THE MEN GRADUATES OF THE 1957 CLASS

Scientific & Technical	
Chemists	3
Engineers - Chem., Civil, Elec., Ind., Mech.	102
Geologists	2
Physicists	10
Mathematicians	2
Business & Industry	
Accountants	17
Airline Pilot	1
Apprentice - Cleaners	1
Business Trainees	30
Insurance	19
Business Managers	3
Investment Analyst	1
Manufacturing Trainee	1
Quality Control	1
Radio & T V	2
Sales	8
Technical Writer	1
Time & Motion Study	1
Agriculture & Horticulture	
Aquatic Biologist	1
Dairy - Farm Manager	1
Dairy - Home Farm	2
Dairy - Lab. Technician	1
Dairy - Plant Manager	2
Feed & Sales Trainee	1
Floriculture Business - Owner	1
Food Industry	2
Herdsman	1
Landscape Architects	2
Lumber Business	1
Production Management	1
U. S. Forest Service	5
Further Study	
Graduate School	51
Dental School	4
Law School	6
Medical School	7
Theological School	2
Veterinarian School	5
Armed Forces	122
Teaching	11
Unemployed	11
Unknown	59

Our assistance to alumni continued throughout the year aiding some to find a change of job or change of geographical location, others to find employment following completion of their military service and others to find new employment due to frustration in their present employment. Approximately 450 alumni were assisted in finding positions through counseling, receiving notices of positions, mailing of credentials, and other details during the past year.

All requests for information on former graduates relative to employment are now referred to this office. Many previously had been handled by the Registrar's Office due to the information desired concerning grades, etc., but this information is now obtained by the Placement Service and the entire detail is handled here.

PART-TIME STUDENT EMPLOYMENT

The student employment picture for the year 1956-1957 was very similar to the previous year except for the fact that the total earnings were about $17,000 higher than the previous year and since only a slightly higher number of students were employed during the year, the majority of this money was spent due to longer hours worked by the students plus a raise in the pay rate at the dining commons from 60 cents per hour to 75 cents minimum. 1224 students received part-time employment in the academic year, 1956-1957, earning $169,496.75, with average earnings of $130.31. The following statistics show the percentage of students earning various amounts throughout the year:

	Class of 1957	Class of 1958	Class of 1959	Class of 1960	Class of 1961	Graduate School	S.S.A.
No. Employed	329	326	282	160	8	99	20
Total Earnings	53,841.99	47,340.65	28,575.83	16,711.50	400.40	21,677.17	1,049.21
Average Earnings	163.65	145.22	101.33	104.45	50.05	218.96	52.46

Grand Total

No. Employed 1,224
Total Earnings $169,496.75
Average Earnings 130.31

670 Students or 61% earned less than $100
290 Students or 23% earned over $100 but less than $200
116 Students or 8% earned over $200 but less than $300
59 Students or 3% earned over $300 but less than $400
31 Students or 2% earned over $400 but less than $500
18 Students or 1% earned over $500 but less than $600
33 Students or 2% earned over $600

PLACEMENT OFFICE FOR WOMEN

The 244 women in the class of 1957 found interesting and worthwhile positions at good salaries. The salary range ran from a low of $2132 for a girl who had to remain with her family in a small town to $5520 for a chemistry major now working as a technical librarian. The greatest need continued to be for elementary teachers. The need for secretarial skills to enter certain fields was again evident. It is hoped that soon a non-credit typing course can be offered on campus.

By November 1957 the class had scattered to 20 states and one foreign country. One hundred and ten are still in Massachusetts, thirty in Connecticut, and twenty-two in New York State.

The following table shows the occupational breakdown of the class. As always a number are going on for further training.

To bring employers and applicants together, 908 interviews were arranged with 131 employers who visited campus. A total of 1,474 credentials were requested by employers.

OCCUPATIONS FOR 1957 SENIOR WOMEN
Summary - November 20, 1957

Further Study		
Graduate Study - Education		3
Medical School		2
English		1
History		1
Botany		1
Law		1
Music		1
Other Study Programs -		
A.D.A. Internships		4
Fifth-year Medical Technicians		4
Occupational Therapy		1
Physical Therapy		1
Radcliffe-Harvard Program in Business Adm.		1
Secretarial		1
Total		22
Teachers		
Elementary		69
Jr. High and High School		16
Home Economics		7
Total		92
Science & Math		
Mathematicians & Engineers		9
Research Assistants -		
Medical		4
Medical Technicians		4
Industry		7
Chemistry		2
Food Technology		3
Miscellaneous		
Market Research		7
Telephone Service Representatives		7
Extension		6
Government		6
Social & Group Work		6
Library Work		6
Insurance		6
Writing (Tech.,Adv., Pub.)		5
Merchandising		4
General Office		4
Home Service		2
Airline Stewardess		2
IBM		1
Banking		1
Investments		1
Private Secretary		1
Own Business		1
Food Work		1
		67
Married & not working(or unknown)		29
Incomplete Information		5
Grand Total		244

Summer Placement

Because the pressure of work to be done for seniors from January through April comes at the same time of year when undergraduates are seeking summer jobs, it was decided in 1956 that very little attempt would be made to individually assist students seeking summer jobs. Job orders were filed in folders by job classifications, aids to writing letters and types of jobs available were mimeographed and distributed, and directories of places for summer employment were made available. Many students were in the office each afternoon poring over this material, but only rarely was there time available in which to help individuals in making decisions. An open meeting was well attended.

Through the dormitories each fall, all women are asked to fill out a card indicating how they spent the summer. These are followed up with requests for references and hopefully, if the employer is satisfied he places an order for the following summer.

As has been pointed out before, to work is the accepted manner for coeds to spend their summers. The financial success of the summer venture may determine how much a student must work on campus during the school year.

VETERAN STUDENTS

Veteran students graduating in the class of 1957 received 42 per cent of the scholastic honors granted to men at commencement time, although the veterans comprised only 18 per cent of the male seniors.

Among candidates for the Bachelor of Arts degree in the College of Arts and Sciences, two of three magna cum laude graduates were veterans. Two veterans were graduated cum laude.

In the same College, one of two magna cum laude recipients of the Bachelor of Science degree was a veteran. Another veteran was cum laude.

Highest honors in the College of Agriculture, magna cum laude, went to a veteran graduate.

In the School of Business Administration one veteran was graduated magna cum laude; and three of seven cum laude graduates were veterans.

In the School of Engineering, highest honors, magna cum laude, awarded in the Department of Chemical Engineering went to a veteran student. Similarly in Electrical Engineering, the only summa cum and magna cum seniors were veteran students.

One of two cum laude students in Civil Engineering was a veteran; and one of two cum laude in Electrical Engineering was a veteran.

Highest honors granted in Mechanical Engineering, magna cum laude, went to a veteran.

In the Division of Physical Education, the two honor students, cum laude, were veterans.

Of 23 men elected to the honor society, Phi Kappa Phi, 10 were veterans. Of nine men elected to Sigma Xi, honorary scientific society, eight were veterans.

It would appear that the veteran students at the University appreciate the opportunities available to them under Public Law 550, the so-called Korean Bill.

One thousand and fifty-one veterans were enrolled at the University (including Graduate School, Stockbridge and special students) during the past year, under provisions of Public Laws 550 and 894, an increase of 206 over the previous academic year. Peak veteran enrollment under these laws probably will be reached in either 1957-58 or 1958-59.

DRAFT REGISTRATION

Some 150 students reaching their 18th birthday during the school year were registered in the office for Selective Service. This did away with the necessity for the students to return to their homes for the process.

Representatives of the U. S. Navy, the Navy Flight Program and U. S. Marine Corps visited campus to discuss with potential draftees the advantages of their several officer candidate programs.

TEACHER PLACEMENT

Graduate work was chosen by many senior (class of 1957) teacher candidates in preference to an initial position. Increasing awareness of the importance of the Masters Degree for teaching doubtless was reason for the action (together, in some cases, with still available training time under the G. I. Bill) and also favorable opportunities to earn the Master of Arts in teaching degree.

Seniors who did follow through on position "leads" were successful in securing congenial employment. Two alumni, already in the education field, who had registered with this office were able to move on to what they considered more attractive positions.

Demand for teachers was greatest in the field of mathematics, followed, in decreasing order, by science-physics and chemistry, English, modern language and social studies. There were numerous opportunities for men trained in "guidance", an apparently expanding field, and some fifty calls for men qualified in physical education or in physical education teaching-coaching.

Notices of available positions came from 412 sources which included public school systems, private schools, colleges and universities, Federal Agencies, Y.M.C.A.'s, boys' clubs and recreation centers. The notices listed a total of approximately 1200 openings.

It is notable that calls from out-of-state sources (233) for teacher candidates outnumbered those which originated in Massachusetts (179)--this in spite of the fact that only Massachusetts school systems were circularized (once during the year) as to the availability of candidates.

SUMMER EMPLOYMENT

Three hundred and eighty-four students filed application and were interviewed with regard to summer work. Suggestions were made, direct "leads" were given and interviews with prospective employers were arranged.

Twenty companies interviewed juniors on campus for summer trainee positions. Nine companies, in lieu of interviewing, asked that juniors make direct mail application.

Representatives of ten government agencies talked with students on campus with regard to summer work and four organizations sent men to campus to recruit underclassmen for summer sales positions.

SCHOLARSHIPS

Information relative to graduate school scholarships, fellowships and assistantships at scores of colleges and universities has been relayed regularly to departments most directly concerned and an up-to-date file of the material has been kept available for students in the Placement Office.

STUDENT LOANS

Higher Education Loan Plan

A new source of aiding in financing a college education was made available to residents of Massachusetts last spring by the organizing of the Mass. Higher Education Assistance Corporation under a special charter enacted by the Massachusetts Legislature in 1956.

Under this plan any resident of Massachusetts can borrow up to $500 per year after he or she has satisfactorily completed the first year. This means that a student can get a maximum of $1500. The loans are made on the student's signature (no indorsers) and becomes due six months after graduation. However the note may be extended up to a maximum of 3 years and can be repaid in 36 equal monthly installments. The charge is at simple interest of one-half of one per cent in excess of the prime rate of interest prevailing at the date of the note in Boston on unsecured commercial bank loans. In no event will it be over 5½ per cent nor less than 3½ per cent.

The Massachusetts Higher Education Assistance Corporation guarantees a substantial part of the principal amount due on such student loans.

The University plays a part in the transaction in that we must furnish to the bank certain required information about the student, his educational program and his record here, scholastic and otherwise.

After the student has applied to his bank for a loan, the bank sends us an 'Education Certificate" which calls for such information as major program, when entered, when he will

graduate, name of high school, estimated yearly expenses, has he satisfactorily completed the first year, is he meeting normal standards in academic work and personal behavior, will he graduate as anticipated, his financial record here, outstanding loans, scholarships received, part-time work and an opinion regarding the studsnt as a good loan risk.

The writer has been designated by President Mather to complete the Education Certificate and to advise and otherwise aid students in securing such loans.

Since its inception last spring, a total of 142 Education Certificates have been completed and returned to banks throughout the state. We have received notification that 114 loans have been granted leaving 28 about which we have not as yet been notified. Most, if not all, of these will be approved. The total amount of loans so far is $52,760.00 broken down as follows:

92 - $500	7 - $300
2 - $450	2 - $250
2 - $400	2 - $200
4 - $350	1 - $170
1 - $340	1 - $50

It is required that the bank be notified at once upon the withdrawal of a student as the loan then becomes due and payable.

University Loan Funds

The demand for short-time loans from the college funds continued to increase during the past college year. In 1954-55 there were 125 loans, in 1955-56 there were 177 and in 1956-57 the number was 247. Eighteen other applications were processed but were not approved by the Registrar for low grades, by the Treasurer for poor credit standing, or by the Dean of Men or Dean of Women for diciplinary reasons.

The University never has had any considerable amount of loan funds which could be repaid after graduation and there has been a very definite need for such funds. The higher Education Loan Plan should take care of this shortage very nicely. I am confident that more and more students will take advantage of this state plan in the future.

STOCKBRIDGE SCHOOL OF AGRICULTURE - PLACEMENT TRAINING
Summer of 1957

There were 158 first-year students assigned to training employment as against 168 the previous year. This loss occurs in two major fields, Dairy Technology and Poultry Husbandry, and is a reflection of the condition of the industries concerned.

The following chart shows the distribution by majors.

Major	Registered in September	Placed Freshmen	Placed Seniors	Cut	Returned for Senior Year
Animal Husbandry	52	48		2	46
Arboriculture	16	16		3	13
Dairy Technology	10	9		1	8
Floriculture	12	9	1	3	6
Fruit	3	3		0	3
Horticulture	26	21		3	18
Poultry	12	11		3	8
Turf Maintenance	12	10	2	1	9
Vegetable Gard.	8	8		0	8
Food Management	12	11		0	11
Forestry	18	12		1	11
	181	158	3	17	141

Three seniors were placed who had not satisfied the placement requirement previously.

There were 6 women registered in the fall, 4 were placed and three returned for the second year.

Registered - Animal Husbandry 1; Poultry 1; Floriculture 3; Food Mgt. 1.

Placed - Floriculture 2; Poultry 1; Food Mgt. 1.

Returned - Floriculture 1; Poultry 1; Food Mgt. 1.

There were 181 registered in the fall and 158 survived up to placement time, a loss of 23 students or 12.7%. Of the 158 who started placement training, 141 returned for the

second year, a loss of 17 students of 10.7%.

The overall loss, from registration (181) to the beginning of the senior year (141), is 40 students, or 22.1%.

The various reasons why the students did not come back for the senior year are listed below.

Failed in class work second semester	2
Married and financial problems	1
Transferred to degree college	2
Failed Placement Training	2
Enlisted in Armed Forces	2
Wrong Vocational Choice	3
Health	1
Unknown	4

Due to sickness, accidents, and operations, eight men lost varying amounts of time from their work as did several who had to put in two weeks of active duty for the National Guard or some military reserve unit.

An interesting sidelight is the courageousness of some members of the class, as nine were married during the summer. They likewise wanted at least a week off for a honeymoon.

The demand for training students is excellent and many more could be placed.

Placement Training - College of Agriculture

Fourteen University undergraduates in the College of Agriculture elected to meet the training requirement during the summer of 1957. The distribution by majors was as follows: Animal Husbandry - 5; Dairy Technology - 3; Floriculture - 3; Agricultural Economics - 1; Pre-vet - 1; Poultry Husbandry - 1.

The continued understanding, cooperation and assistance of the administration is sincerely appreciated by all members of the department.

Respectfully submitted

Emory E. Grayson
Director of Placement Service

November 22, 1957

UNIVERSITY OF MASSACHUSETTS

Memorandum

From: Helen Curtis, Dean of Women Date: December 3, 1957

To: Dr. J. Paul Mather, President

Subject: Annual Report of the Dean of Women

The accelerated progress of the University of Massachusetts is having a noticeable reaction among women students of the campus, reflected in a new pride in their University, enthusiasm, and readiness of student leaders to assume responsibilities. The stepped-up pace has made greater demands on the Office of the Dean of Women. Pressures have required changes in my use of time: (1) more work with key student leaders, (2) more training and reliance on dormitory Heads of Residence for dormitory administration and student counseling, (3) more reliance on communications with other departments through various University committees and SPAC.

Throughout the year, conferences with student leaders of the Senate Committee on Women's Affairs, Judiciary Board, dormitory House Councils, Panhellenic, Scrolls, and Mortar Board are an essential part of my work. (Reference list attached) Time is well spent in encouragement and guidance of these groups whose activities enrich and strengthen the whole student body. Of special value have been the pre-college House Counselors' Workshops, the Student Leaders Conference (sponsored by the entire Senate), a Women's Affairs Convocation with alumnae speakers and a recent Mortar Board regional conference held here. Student participation in University Committees (Social Activities, Calendar Coordination, Discipline, etc.) frequently requires time-consuming deliberation but is valuable experience and results in more effective campus policies.

The Offices of the Dean of Men, Dean of Women, and Guidance Director have worked together with Freshman faculty advisers. Most faculty are responsive to suggestions in this area and more needs to be done in this important part of our guidance program. Advisers frequently call on the Dean of Women and Heads of Residence for more information and help with certain students and a large percentage of Freshman faculty advisers responded to invitations from their advisees to attend dormitory coffees and become better acquainted. These small gatherings of advisees and their adviser frequently turned from purely social periods to serious and stimulating discussions of academic matters.

The University of Massachusetts is fortunate in the fine calibre of women who are the heads of women's dormitories. Their educational and cultural backgrounds and the services they render far outrank the low grade of "07" as the position is now classified in the Barrington scale. The appeal to the Personnel Board of Review, which was filed January 29, 1957 and heard October 10, 1957, to upgrade this position needs attention and support in administration budget requests. This is especially urgent as new staff need to be recruited to fill additional dormitories and vacancies left by retirement of the present staff. One of our most valuable Heads of Residence, Mrs. Madeline Cartwright, was lost to Simmons College, because we could not match their salary.

Morale has been high in the women's dorms where student government aims for the development of individual and social responsibility. Innumerable students are helped by the counselors or Heads of Residence to resolve minor problems of social, personal, physical, emotional or academic nature and are helped to contact others on campus if a problem is serious. The year has been characterized by a full range of normal difficulties with only a few serious discipline or psychological problem cases. Faculty-student coffee-hour discussions, informal gatherings with foreign students and campus visitors, and traditional dorm festivities have added to the enjoyment of "dorm life." Massachusetts artists have generously continued loans of their paintings for use in dormitory living rooms, and vending machine profits added to the girls' own donations have enabled the purchase to be made of an additional tea service, ping-pong table, one T-V set, and other social equipment.

The Heads of Residence of University women's dormitories have been extremely helpful by carrying most of the load of work in women's housing assignments and administration, though additional secretarial help is needed for this work, especially preceding each semester. Our plan of housing Freshmen in separate dorms has many advantages but also some complications and currently underway is a student and staff study of plans in other colleges and universities which might be adapted for our use.

A number of graduate women students who requested dormitory rooms were turned away and had to take inconveniently located rooms in town as the women's dormitories are filled to capacity with undergraduates, though we always make room for the foreign women graduate students. The time has come when it should be University policy to provide housing for all graduate women students who desire it. It is planned next year, when Lewis House becomes a women's dormitory and women's housing is eased a bit, that some graduate women students can be included at Abigail Adams, which is well-suited as it is the only dormitory with a large number of single rooms.

The University Dining Commons (now principally serving women students) has achieved a smoother operation this year, although still handicapped by a lack of regular workers. Everyone has appreciated the readiness of the Manager (Mr. Jack Martin) and the Home Economics teacher of institutional foods (Mrs. Jane McCullough) to cooperate with an interdorm committee guided by Mrs. Judge (Knowlton). Many small problems have been ironed out, and suggestions adopted, increasing satisfactions on both sides.

Sororities conduct a full schedule of activities centered in their small houses. In view of the fact that the 155 (maximum) now housed in their seven houses equals the number a single dormitory holds, one realizes it is an inordinate amount of the Dean of Women's time which is required to supervise their operations to see that University standards of safety, sanitation, and general welfare are maintained. They are wistful about building new houses but are unprepared to assume the large financial obligations which would be entailed.

Although sororities and fraternities hold the largest number of social functions, most women students are spending their leisure in the dormitories and extra-curricular activities centered in the Student Union. The Student Union has undoubtedly given the greatest boost to student morale this campus has known. It is not only meeting an urgent need as a meeting place for numerous student organizations and as an attractive facility for social affairs, but is adding a new potential of cultural enrichment.

Though this report has dealt mostly with extra-curricular aspects, I have been much concerned with women students' academic progress. Most women students are conscientious about their academic work. A very small percentage are in the lowest grade groups and, though only a few are exceptional scholars, the women's averages are good and a relatively high percentage achieve honors. Marriage is, of course,

their first objective but most of them seriously desire the enrichment of a general education and realize the importance of college training to supplement family income or rely upon in case of need.

A high event in the year was recognition given 84 women students with averages above 3.4 who were invited to the President's House in March for the annual Women's Honors Tea, where they were greeted by President and Mrs. Mather and Dr. Gertrude Lewis, guest-speaker from the United States Office of Education. Recognition of Phi Kappa Phi members was given at the Women's "Who's Who" Convocation and interest was keen in the announcement of comparative averages of sororities and the list of Freshmen achieving 1.8 or above by mid-semester report day. As soon as I B M can handle the computations, additional lists of comparative averages of classes and dormitories, and the prompt releasing of Honors Lists will add to scholarship motivation and give deserved recognition.

Financial problems handicap many worthy women students whose summer and part-time earning power does not yield as much as men's. Numerous recommendations have to be written to Foundations and various donors to secure funds for deserving students. Marriage has overtaken other reasons for withdrawals but there are still many who give up college because of insufficient funds. If misfortune strikes a family, it is the daughter, not the son, who is expected to give up college and help at home or earn to help support the family, indicating that many people still do not believe in the importance of educating women.

The addition of women in three key positions would strengthen the University of Massachusetts personnel staff: (1) an associate in Admissions who would work particularly with High School interpretation of professional fields for women in Nursing, Home Economics, Physical Education, as well as other offerings of the University; (2) a woman assistant Guidance Director (a mental health counselor) who could work with either men or women, increasing our needed services to normal students; and, (3) an Assistant Dean of Women to share the greatly increased administrative load.

The Advisory Council of Women, under the leadership of its Chairman, Mrs. Frederic Rothery, is renewing its active volunteer role in promoting scholarship aid and in interpreting University opportunities for women. Through their efforts and fine influence numerous women students are receiving scholarships and several graduate fellowships.

During the past year, I have been a speaker at several high schools, at conferences, and at branches of the American Association of University Women. I attended, as Universal delegate, the National Convention of the American Association of University Women and, by invitation, a Student Personnel Seminar at the University of Pennsylvania which was conducted by the Harvard School of Business.

I serve as a member of the Board of Incorporators for the Horace Smith Fund and on the Executive Board of the Massachusetts American Association of University Women. Now that my committments to AAUW are much lighter, I have accepted election to the Executive Board of the Massachusetts Association of Deans of Women, which will open the way for closer cooperation with Massachusetts High Schools.

Respectfully Submitted,

Helen Curtis

Helen Curtis
Dean of Women

HC:dwc

UNIVERSITY OF MASSACHUSETTS

Office of the Dean of Men

ANNUAL REPORT

December 1, 1956 -- November 29, 1957

Date: December 1, 1957

The following information is presented in response to the annual request for a report dealing with the activities of this office and its adjuncts. Comments on the Guidance Office, Student Health Service, Foreign Students, Men's Dormitories, and the Interfraternity Council are appended.

No major changes in the general operation of this office have been effected during the period covered by the report. However, two distinctively different kinds of emergency situations arose during the past year each of which was handled administratively by the Dean of Men and certain associates whom he pressed into service. The willingness with which others - students and staff alike - turned to is indeed commendable.

The first problem was obtaining manpower to combat forest fires which raged out of control in Shutesbury and in Montague. For three full days, a Civil Defense alert kept my office on duty around the clock. Manpower and materiel were gathered and dispatched with no great degree of difficulty. Some of the men have been paid for their services and it is my understanding that repayment for lost supplies is being made by the Forest Fire Relief Board.

Second was the problem of setting up, operating, and administering several emergency infirmaries to care for several hundred students who were ill with a flu-type infection. Again, the ready willingness of students and staff made the activity move along with relatively few hitches. While a basic amount of pre-planning was made in August, not all contingencies were foreseen and this office was manned almost continuously for approximately two weeks.

The foregoing suggests the rapid establishment of emergency procedures so that we can "be prepared" for whatever contingencies may arise in the University Community.

Considerable attention was paid to the improvement of fraternities during the past year. A total of eleven (11) personal conferences with fourteen (14) Chapter Presidents have been held; each conference lasted for an average of a half hour. In general, fraternities have been doing better this year. Their academic averages have improved, their manners and morals have shown a decided change for the better, and their place in the University has been proved in almost all instances. One Chapter, Lambda Chi Alpha, however, has continued to go down grade and this office feels that the expenditure of further energy in its direction would be futile. Certainly no tears would be shed here were its charter removed!

The area of men's dormitories needs a great deal of attention - more

than can be given efficiently by this office with its multitudinous responsibilities without sacrificing much which is currently being done. Ideally, a competent man should be employed to give the major portion of his time to the administration of dormitories and, hopefully, this may be begun in the near future.

Mental health remains an unsolved problem although the Division of Mental Health at the State level is endeavoring to locate a competent psychiatrist to assign to our Student Health Service. Again, it is hoped that we may accomplish such an arrangement in the near future. Identification cards for all students were made available this fall for the first time. The one dollar charge covered the procedures adequately and provided a laminated card plus several prints of individual photographs for record purposes. The cards serve not only simple identification purposes, but are used as admission tickets to home athletic events and concerts, library passes and a variety of other functions. A few details on the processing need to be reshaped for succeeding semesters and plans are currently afoot to accomplish this. Without question, the format of our I.D. Card is as good, if not better, than that of other similar mechanisms seen at other institutions.

Interviews with students concerning their problems - ranging all the way from extensive counseling to the receipt of invitations to social functions - has averaged approximately 120 per month. Not included is the great number of telephone calls and personal visits received at my home.

Tribute must be paid to the outstanding clerical staff of this office without whose charm and efficiency the total operation would be untenable.

Robert S. Hopkins, Jr.
Dean of Men

RSH:bl

UNIVERSITY OF MASSACHUSETTS

M e m o r a n d u m

From: Student Health Service Date November 20, 1957

To: Dean Hopkins

Subject: Annual Report

The calendar year 1957 was uneventful until October 10, at which time the student body was hit by an epidemic of influenza - presumably Asian. During the next four weeks, over 600 students were treated as bed patients on the campus. To accomplish this, the regular Infirmary and the recreation rooms in Knowlton and Thatcher dormitories were used for girls, and both the large and small ballrooms in the Student Union were used for boys.

In addition to those handled locally, it is estimated that an equal number went home for treatment, with or without the knowledge of the Health Service.

The University physician takes this opportunity to thank everyone who helped in any way, to meet this emergency.

Ernest J. Radcliffe, M. D.
University Physician

EJR:lo

UNIVERSITY OF MASSACHUSETTS

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Ernest J. Radcliffe, M. D.
University Physician

EJR:lo

M e m o r a n d u m

To: Student Health Service Date: November 15, 1927

From: Dean Hopkins

Subject: Measles Epidemic

The calendar year 1927 was unfavorable in which time the student body was hit by an epidemic measure. During the next four weeks, over [illegible] were the [illegible] problems on the campus. To [illegible] the regular infirmary and the recreation rooms in Hinsdale Dormitories were used for girls, and both the small buildings in the Student Union were used for boys.

In addition to those handled locally, [illegible] that an equal number went home for treatment, with the knowledge of the Health Service.

The University physicians [illegible] many persons who helped in any way, to meet this [illegible]

UNIVERSITY OF MASSACHUSETTS

Memorandum

FROM: Guidance Office DATE: November 27, 1957

TO: Dean Hopkins

SUBJECT: Annual Report

The activities of the Guidance Office are designed to aid and encourage students in the development of the highest achievement, of which they are capable, educationally vocationally and personally. The first phase of these activites is represented by the administration of aptitude and achievement tests to all entering freshmen and to veterans of military service who are applicants for admission. During 1956-57 out-dated forms of tests were discarded and the transition completed a modern sequence of classification tests. In addition, placement tests were administered which permitted students with superior skills in specific subject areas to undertake advanced study at the outset of their academic careers. The results of the various testing programs were made available to all faculty advisors for use in their counseling of students.

Over one hundred and fifty freshmen participated in the series of group meetings held during the early weeks of the semester to assist them to more clearly understand the responsibilities of college learning and to develop more productive methods of study. Improved facilities within the office made possible reading improvement instruction with selected students from these study-groups. While it was not feasible to undertake intensive remedial reading instruction with severely handicapped students, measurable benefits resulted from aiding students to increase their reading speed and comprehension in conjunction with the improvement of basic study methods. Students participating in this program are, of course, volunteers, and the number which can be accepted is limited by available staff time. The results achieved from combining reading practice with study methods based on freshman course materials appear to be highly promising.

Counseling interviews and the administration of aptitude tests selected to meet the needs of specific students remain the primary function of the Guidance Office. There are points of decision or difficulties which arise at some time in the careers of nearly all students which require counsel or conference with a staff member. In many cases faculty advisors can meet these needs for personal assistance. In others, however, either by referral from these faculty members or by student decision, specialized aid is sought in the Guidance Office.

Slightly more than five hundred students initiated contact with the Guidance Office during the past year. This is about the same number as in each of the two preceding years, and represents the maximum number which can receive even minimum guidance service with present staff. Although counseling is most effective if it is available without appointment delays, frequently two to three weeks must elapse between initial contact and the first counseling interview. As curriculum specialization increases, the need for vocational and educational guidance becomes not only greater, but is moved to an earlier period in a student's academic career.

To improve aptitude testing and counseling, research investigations were initiated concerning the efficiency of the newly introduced classification tests and of basic interest measuring techniques. Graduate student thesis research conducted within the office also contributed useful data. As in past years the Guidance Office administered locally, various testing programs for admission to graduate study, law, teaching and draft deferment.

Respectfully submitted,

William F. Field,
Director of Guidance

F/b

UNIVERSITY OF MASSACHUSETTS

Memorandum

From: Sidney F. Wexler Date: November 13, 1957

To: Dean Hopkins

Subject: Annual Report, 1956-57

In preparing this report concerning the work of the Adviser to Foreign Students for the period December 1956 to November 1957, I have determined to be relatively brief. My philosophy of this service, the scope of my activities, and the conclusions I draw as well as the recommendations I urge are essentially the same as in my last report (November 14, 1956). That report is a matter of clear record. While I see no need to repeat its details, I do indeed feel the necessity of saying that it should be restudied. As an over-all observation, I invite your attention to the fact that I would make no important subtractions therefrom, but would add the items that follow for their more current substance and newsworthiness.

1. This year we have 48 foreign students, representing 23 other lands. To my knowledge, this is the highest number of international students the University has ever had. To avoid extended statistical listings, I mention only immediate past history: during the Fall Semester of 1956-57 we had 30 overseas students (19 countries); during the Spring Semester of 1956-57 we had 31 overseas students (18 countries).

2. Through the generosity and initiative of the Interfraternity Council, we have brought to the University this year two Hungarian students, both freshmen in the School of Engineering. The University has contributed two of its Trustee-authorized tuition-waiver foreign student scholarships, while the fraternity men are meeting all other expenses to maintain the two refugees on a calendar year basis.

3. Per action of the Board of Trustees, it will be possible, beginning in September 1958, to admit up to 5% out-of-state students to the entering undergraduate classes. Since out-of-country students may figure in this 5%, I am heartened by this additional sign of maturity and sense of international responsibility.

4. This year, and so far as I know, for the first time, recognition has been given to the linguistic needs of our foreign students. Dr. Alex Page, through the cooperation of the English Department, is teaching a section of English as a foreign language.

5. We are constantly building a singular group of alumni, on a worldwide basis. This is a kind of international alumni association not really envisioned by the Associate Alumni, and out of category with it. But it is most significant and in need of integration and development for the sake of the University, the Commonwealth and the United States. My mail from these people is steadily increasing and reveals their intellectual appreciation of, and emotional attachment to, Alma Mater.

6. This special service of counseling foreign students must obviously be expanded during the "normal" school year. Furthermore, the time has come for making it available on a 12-month basis. This is true not

only because the University as a whole is moving to the calendar-year basis, but also because the international student simply does not have a Massachusetts home to go to during the summer months. He stays on in Amherst during that period, therefore, studying and/or working. His personal and academic problems thus need attention on a full-year basis. While other reasons kept me on campus during the entire summer of 1957, making it possible for me to attend to the foreign students' situations and questions, we must plan for all years. This is but another, reinforcing reason for my repeated statement that the Adviser must have an assistant: the "coverage" must be for twelve months, not eight nor eleven.

7. The March 1957 issue of the Newsletter of the National Association of Foreign Student Advisers (the professional organization in this field) carried my article (pp. 6-7) on "The Job of an FSA".

8. To illustrate the truly limitless limits of this special "special service", and to conclude on a human interest note, I was asked to serve in loco parentis last winter for a Chilean foreign student. On January 26, 1957, I gave Fresia Muñoz in marriage to a blessed Yankee, Clayton S. Bradford. Through that connection, I shall pass from father to grandfather next month. Next month, also, I shall become a Japanese father or uncle: the exact kinship has not yet been explained to me.

Respectfully submitted,

Sidney F. Wexler.

Sidney F. Wexler
Adviser to Foreign Students

UNIVERSITY OF MASSACHUSETTS

Memorandum

From: William Starkweather Date: December 1, 1957

To: Dean Hopkins

Subject: Report on the Interfraternity Council

The Interfraternity Council's year of operation was characterized by conscious efforts towards maturity in deliberation and action. Early in the season, the fraternity system as a whole came under strong attack in areas pertaining to membership selection. The Council refrained from verbal and written skirmishes, met quietly and thoughtfully for a number of weeks, and finally framed a unanimous and well-worded statement to be submitted through appropriate channels. The statement did credit to fraternity ideals. This statement, apparently, helped in the University's establishment of a "clause removal date" sufficiently in the future to allow the affected chapters time for national conclave action although, in fact, the remaining offending clauses were later all removed at the respective 1957 summer conventions.

The year was marked by assorted other highlights. The Council tried to sponsor more interest in academic and fraternity ideals by bringing two of the most outstanding educators and fraternity men (Judge F. H. Myers, president of IRAC and F. Van Derbur, president of N.I.C.) to speak to the fraternity body. The first attempts at a delayed rushing program, allowing freshmen to better establish themselves academically, apparently proved itself with a greater freshman interest in fraternities (as seen in Round-Robin statistics) and a larger number of pledges. The fraternity colony of Phi Sigma Delta was made a new National Chapter.

The major accomplishment of the year was the perfection of a plan to support two Hungarian students for up to five years of campus study. Each fraternity man was pledged to up to a dollar per semester to contribute to the commitment of up to $9,000.00. The two students have attended classes since September, and the built-in educational feature of the plan - that the students take their meals in the various houses, thereby encouraging a good exchange of ideas and understanding is working out nicely.

William C. Starkweather
Assistant Registrar and
Advisor to I.F.C.

UNIVERSITY OF MASSACHUSETTS

Memorandum

From: Charles Goldman Date: November 19, 1957

To: Dean Hopkins

Subject: Men's Dormitories

The period covered by this report has once again seen an almost complete change in the personnel in charge of men's dormitories. As has been the policy in the past, an orientation program was carried out which acquainted the people with their responsibilities and duties. This type of program paved the way for a smooth start of the current academic year.

This year was indeed different from previous years in two respects. The first was a more intensive testing program for the freshmen which was entirely different from those given in past years. Secondly, an influenza epidemic was predicted which certainly could have resulted in dire consequences with people living in such close contact as there exists in a dormitory. Dr. Radcliffe outlined the plan which appears to have worked very well. The Student Union ballroom was used for male patients and the Infirmary and the recreation room in one of the Womens' dormitories was used for female patients. In toto, at least one fifth of the total enrollment appeared to have had the disease during the peak of the epidemic. Many members of the administration, the staff, and their wives set a fine example by acting as volunteers ministering to the sick students during this crisis.

The parking situation appears to have changed very little, in that the number of cars appears to be increasing, but personally, I have observed that the Campus Police have been doing a excellent job in patrolling the area adjacent to my own dormitory and I have had very little trouble parking my own automobile.

The use of television sets in the individual rooms of the dormitories has finally been settled. After the trial given by the Dean of Men to the users of individual sets it was finally decided that they definitely not be allowed in the rooms. The dormitories are now taking steps to have them installed, on a pay-as-you-go basis, in the recreation rooms of each respective building. This type of plan was tried in Baker House and worked very well.

As the University grows larger, the tendency in dealing with the individual student is to lump, characterize, and number him for ease of handling. The individual with his capabilities, problems, and capacities are still the main topic of conversation when the faculty residents meet. It would appear from this that as the University doubles its enrollement, the most logical step would be to keep the size of the dormitories such, as the majority of those on campus are, so that the individual is not completely dwarfed and forgotten. This recommendation is one that I think should not be overlooked. The strain

and the magnitude of responsibility involved in the administration of the larger units does not lend itself to the effective type of counseling which is basic fundamental aim of this dormitory system.

Charles Goldman

UNIVERSITY OF MASSACHUSETTS

MEMORANDUM

From . . Gilbert L. Woodside . . . . . Date . December 3, 1957. . .

To . . . Mr. James W. Burke, Secretary of the University . . . . . .

Subject . . . .Annual Report. . . . . .

I am happy to present the annual report of the Graduate School.

The trend of increasing enrollment in the Graduate School continued during the academic year 1956-57. Three-hundred and fifty-three students were enrolled in the fall and 387 in the spring. These totals include 269 men and 84 women in the fall and 282 men and 105 women in the spring. Fourteen advanced degrees were awarded in February 1957, 72 in June, 1957, and 30 in September, 1957. These were distributed as follows:

Doctor of Philosophy	11
Master of Arts	11
Master of Arts in Teaching	3
Master of Science	73
Bachelor of Landscape Architecture	3
Master of Landscape Architecture	2
Master of Business Administration	8
Master of Science in Civil Engineering	4
Master of Science in Mechanical Engineering	1
Total	116

Approval was granted during the year for the offering of the Master of Science degree by the Department of Forestry. This brings to a total of 35 the number of departments offering work leading to a Master's degree. The Graduate School Council is preparing to receive applications from three additional departments to offer work at this level. The Trustees approved the request of the Graduate School and the School of Education to award the Master of Education degree to candidates who have successfully completed the requirements. Nine departments are offering work leading to the Ph.D. degree.

A significant forward step was taken during the year by the establishment of what are called Departmental Fellowships. These fellowships are for the purpose of providing help to departments either in the form of teaching assistance or research assistance. In other words, a Departmental Fellow may be used by a department to aid in the teaching program or he may be used on research projects or his time may be divided between the two activities. As with Teaching Fellows it is essential that the Departmental Fellows spend

half of their time taking courses in the Graduate School and the other half of their time working for the department. A significant feature of the Departmental Fellowship program is that the Fellows are chosen on a competitive basis from applications received by all departments offering major graduate work. The reason for this provision is the desire of the Graduate School Council to attract the best possible applicants. A second significant feature of the program is that the stipend may range from $1,200 to $2,200. Comparison of these figures with those provided by a survey just completed for the Graduate Division of the American Association of Land Grant Colleges and State Universities shows that the $1,200 stipend is far below the average stipend provided in other Land Grant Universities, but that the $2,200 stipend is high enough to compete favorably with all but a very few of these institutions. It should be pointed out, however, that in preparation for the academic year 1957-58 the Fellowship Committee of the Graduate School Council made departmental fellowship awards with an average stipend of $1,727. These fellowships were awarded to 13 students distributed among 11 departments for the academic year 1957-58.

Because of the importance of the Departmental Fellowship program for the recruitment and training of future college teachers the Graduate School feels that the program should be greatly expanded in the immediate future. These are the people, together with the Teaching Fellows, who must be relied upon to do the teaching which is going to be demanded of colleges by the greatly increased numbers of students. Therefore, the obligation of the Commonwealth to do its part in helping to provide more college teachers seems crystal clear.

In addition to the stimulus to research provided by the Departmental Fellowship program, the Graduate School continues its efforts to encourage creative work by all members of the faculty. One significant means to this end is our constant attempt to influence the climate of opinion on the campus in such a way that faculty members will come to feel more or less "out of it" unless they are engaged in a research project. We have by no means come close to this goal, but it seems evident that progress is being made. We are especially encouraged by many of the new appointments which have been made during the past three years. This is particularly true of a number of department heads who not only have come here with active research projects of their own, but have already demonstrated by their appointment policies that they intend to build up staffs dedicated to the ideal of the teacher-scholar concept. Given the active support of school and college deans it seems evident that this trend will be accelerated and that the University will continue to grow in intellectual as well as in physical stature.

We need to be able to offer more released time from routine teaching duties to members of the faculty who have demonstrated willingness and ability to do significant research. A teaching load of twelve contact hours

is really quite a heavy schedule to give a college teacher who at the same time is engaged in an active research program. The Commonwealth should recognize the value of both pure and applied research and it should give evidence of this recognition by allowing a reduced teaching schedule for a faculty member who provides satisfactory evidence to his department head and dean that he is engaged in productive research.

In closing may I again emphasize my proposal made in previous years that the University should establish a few University Professorships. The justification remains the same as in previous years and will, I believe, become more intensified as the University continues to grow.

Gilbert L. Woodside

Gilbert L. Woodside
Dean, Graduate School

GLW/c

UNIVERSITY OF MASSACHUSETTS LIBRARY

ANNUAL REPORT

July 1, 1956 - June 30, 1957

The fiscal year 1956/57 has shown an improved situation for library service to the University community despite the increased student enrollment which numbered 4,516 in September 1956.

In the annual appropriation for the fiscal year an equipment allocation of $2,000 was given to the Library in order that the purchasing of office equipment might be continued for the Acquisition, Catalog and Reference Departments; a project which had been initiated in the previous fiscal year. Until the year 1955/56 the Library had been allocated the sum of $50.00 per year for equipment and this had dated back to the opening of the Goodell Library building in 1935. Typewriters and office furniture were antiquated and there was insufficient office equipment to take care of the needs of staff added to the Library since 1952. The Library actually was forced to expend $15.00 a year to maintain ancient typewriters which had a turn-in value of $10.00.

During the month of July, 1956, new fluorescent lighting was installed in the Librarian's Office, Secretary's Office, Catalog Room Annex, Reference Room, Reference Office, Reference Desk, Acquisition Office, Reserve Book Desk and Reserve Book Annex. This lighting which had been contracted for in late June of 1956 has increased the illumination in the reading areas and offices from 10 to about 35 foot candles.

Personnel

The situation with regard to library personnel remains unsatisfactory from the point of view of adequately trained staff for maintaining a proper level of service to a university campus.

The state personnel classification leaves much to be desired since all positions are classed in three job groups with base salaries, $2938-3497-4043. These salaries

do not allow for the selection of trained library personnel since in the highly competitive market for librarians, institutions are offering $4500 or better for graduates of library schools with the M.S. degree and with no library experience. Supervisory personnel cannot be hired for the University Library with the necessary training and years of experience which are so necessary at the salaries which now prevail in the state classification for library personnel. At present 14 persons or 82% of a staff of 17 are working as sub-professional and clerical personnel undergoing training while on the job to carry out the several service functions of the Library. Under these conditions it is not surprising that three trained librarians cannot carry out the necessary administrative work and still supervise properly each individual staff member. Those junior staff members who have ability have been given some share of the supervisory detail; however this is still not adequate or responsible supervision.

The University of Massachusetts Library rates among the lowest half dozen college and university libraries in the country in the ratio of trained librarians to untrained staff based on total size of staff. This is an unenviable position to be in, especially when good service to readers is to be maintained and adequate acquisitions and cataloging programs are to be carried out for an on-campus population of nearly 6,000.

In the budget estimates for 1956/57 twelve personnel positions were requested: an Assistant Librarian, a Chief of Catalog Department, a Chief of Reference Department, 3 Assistant Catalogers, a Reserves Librarian, a Circulation Librarian, 2 Order Assistants and 2 Serials Assistants. These positions were requested in an effort to provide a minimum number of library trained personnel for the services which should be offered by a university library. The personnel budget requests were deleted in legislative committee and no new positions were provided in 1956/57.

The University Administration agreed thereupon to provide the Librarian with two positions: an Associate Librarian for acquisitions and an Assistant Librarian in charge of the Catalog Department. These positions were to become available only when properly qualified persons could be found by the Librarian. The positions were created under the "Freedom Bill" (Chap. 556, Acts & Resolves 1956) of the University as an emergency measure to provide necessary positions which could not be secured by annual budget requests.

Mr. Benton L. Hatch who had been serving on the staff as Chief of Acquisitions since July 1, 1955, was appointed to the position of Associate Librarian on September 1, 1956.

After many months of searching and interviewing for an Assistant Librarian, Miss Irene Kavanaugh was appointed on May 1, 1957.

The Librarian has been most fortunate in securing the services of these persons since their educational backgrounds and experience in other libraries enables them to bring insight and ability to these important supervisory positions.

During the year the Barrington Associates reclassified the state personnel which resulted in the raising of salaries in the several library grades but on an inadequate basis to attract trained and experienced personnel.

Acquisitions Department

The work of the Acquisitions Department was slightly reduced in the current year due to the fact that the total appropriation for books and periodicals was $34,570 as compared with 1955/56 when the appropriation amounted to $41,513. This has resulted in a reduction of $6,943 for books and periodicals in 1956/57. The original budget request for 1956/57 for the book account was $75,000.

An analysis of expenditures for the several library accounts for the six-year period 1951/52 through 1956/57 may be consulted in Appendix D of this report.

The reduction in number of orders processed afforded Mr. Hatch an opportunity to begin work on a study of the serial and periodical needs of the University in

preparation for an accelerated purchase program for the Library which is anticipated in the fiscal year 1957/58.

The statistics for the department are as follows:

Work Load of Acquisition Office, 1956/57

3500 orders processed
1850 invoices processed
4100 volumes (not including gifts, or pamphlets, microfilms, etc. ordered)
1280 subscriptions

Catalog Department

From July 1, 1956, until May 1, 1957, the Catalog Department was under the supervision of Mrs. Sosie Katchikian who performed very ably as Cataloger under the guidance and supervision of Mr. Hatch pending the arrival of a fully trained Assistant Librarian as Head of the Catalog Department. During this period the normal flow of cataloging continued with few interruptions. It was necessary, however, to set aside the more complex and intricate serial cataloging until a trained librarian became available.

On May 1, 1957, Miss Irene Kavanaugh took over the work as Head Cataloger and a reorganization of procedures and work routines was immediately undertaken to improve the flow of work for the department.

Appendix A in this report summarizes the statistics of the department.

A Comparison of the total number of volumes processed in the two years 1955/56 and 1956/57 shows 6,400 volumes and 7,838 volumes respectively or an increase in 1956/57 of 1,438 volumes. Part of the increase was due to the 3,100 volumes of bound periodicals which were accessioned in this year as a result of the first large binding contract in eleven years.

Circulation and Reference Department

This department under the supervision of Mr. Martin Hubbard functions as

the reader services unit including general circulation, reserve book circulation, reference, interlibrary loans, serial checking and stack maintenance.

There are five persons working full time in this department as well as four persons from other departments who work in this section when additional assistance is necessary. There are eighteen student assistants who shelve books in the stacks and carry a portion of the servicing of the Library on nights and weekends.

This department suffers seriously from a lack of trained supervisory personnel since the techniques and services are so varied as to require a minimum of three trained staff members. There are at present no library trained staff members although the staff is recruited primarily from among promising college graduates. It is hoped that library trained personnel may be added in the ensuing year.

This service area of the Library is always popular with staff members as it affords work with students and faculty and is varied enough in its scope to whet the interest factor of the individual worker.

The statistics of circulation appear as Appendix B, the interlibrary loan statistics as Appendix B-1, the reserve book circulation as Appendix B-2, and the summer school reserve book circulation as Appendix B-3. In addition the tally of the number of students using the Library building appears as Appendix C.

New Building Plans

During the year the Librarian and Associate Librarian spent many hours revising the architectural plans for the new library addition (Project U-803-R Massachusetts Division of Building Construction). Complete floor layouts for all furniture were made and the location of all service facilities were designated. Several conferences were held with the architects, Ames & Graves, and with the personnel of the Division of Building Construction to review the changes in floor plans as suggested by the librarians. A satisfactory agreement was reached late in June of 1957 and the architects were preparing final drawings for submission to

the Division at the time of the writing of this report.

Hampshire Inter-Library Center

At the request of the directors of the Hampshire Inter-Library Center, Mr. Keyes D. Metcalf, retired Director of the Harvard University Library, was commissioned to undertake a complete study of library cooperation among the four colleges, Amherst, Mount Holyoke, Smith and the University of Massachusetts. Several conferences with the librarians and administrative officers of the institutions were held.

Mr. Metcalf's report appeared in March of 1957 as The Hampshire Inter-Library Center: a survey of its background and its problems with recommendations for the future.

Closer cooperation in the purchasing of serials and rare books among the four libraries was urged. In addition an estimate was made as to the financing of the Center in the ensuing years. It was suggested that each institution's share of support should be increased from $500 to $4000 beginning in the fiscal year 1958/59. The University would also offer one complete floor of the new library addition as the official home of the center.

The internal supervision of the Library and its service and personnel problems have taken an increasing amount of the Librarian's time during the year.

Problems

The most pressing problems for immediate action are

1) Library trained personnel in the proper number to allow for the supervision required to carry on the intricate library details necessary to provide good library service.

2) Reappraisal of the campus-wide library situation concerning departmental libraries and the elimination of duplication of books and periodicals which have been requested in the past to maintain "pocket boroughs" predicated on convenience.

3) Intelligent and well-conceived appraisal of a library acquisition program geared to a realistic teaching program taking into account the undergraduate as well as the graduate programs. In many departments the graduate program is given priority over the immediate problem of undergraduate teaching.

4) A greater use of library facilities by faculty and students which can be effected only with a large, well-trained, well-paid reference staff. Too often the faculty comment on the unavailability of library resources when adequate knowledge of the use of the Library would reveal a situation quite the opposite. Reference personnel with experience are the only answer to this.

In closing the Librarian wishes to express his appreciation to the University Administration for the support which it has offered him in a difficult period of expansion and reorientation.

Respectfully submitted,

Hugh Montgomery

Hugh Montgomery
Librarian

December 9, 1957

Annual Summary of Statistics

Acquisitions and Cataloging Statistics

July 1, 1956 - June 30, 1957

Books Cataloged by Dewey Classification Groups			Books Discarded
Dewey Classification		No. of Vols. Added	No. of Vols.
General	000	254	14
Philosophy	100	145	53
Religion	200	83	42
Social Sciences	300	955	357
Language	400	50	
Science	500	1009	
Useful Arts	600 (except 630-9)	696	31
Agriculture	630-639	191	1
Fine Arts	700	144	
Literature	800	415	4
Travel	910-919	80	
Biography	920	202	
History	900-909,930-999	343	1
Periodical		3206	
Microfilm		65	
Total		7838	503

Total Books Processed		7838
Total Books Withdrawn		503
Net Total Added		7335
Total Books in Library System		207,165
Devens Books Recataloged		1
Replacements Cataloged		51
Total Purchased	Books	3253
	Serials	4073
		7326
Total Gifts	Books	379
	Serials	133
		512

UNIVERSITY OF MASSACHUSETTS LIBRARY

Annual Summary of Statistics

Circulation Statistics

July 1, 1956 - June 30, 1957

Total registered borrowers:	3769
Total circulation:	28,517 volumes
Average circulation per day:	92.29 volumes
Average circulation per reader:	7.57 volumes

Circulation by Dewey classification:

000 - General Works	183
100 - Philosophy	753
200 - Religion	622
300 - Social Sciences	4522
400 - Language	235
500 - Science	819
600 - 629, 640-699 - Useful Arts	1217
700 - Fine Arts	767
800 - Literature	6067
900-909, 930-999 - History	2413
910-919 - Travel	437
920-929 - Biography	863
Periodicals	141
Pamphlets	64
630-639 - Agriculture	469
Overnight Reserve Books	8758
Roman Catholic Books ("R")	23
Interlibrary loans	164
Total volumes circulated (exclusive of library building use)	28517

Largest circulation by classes:

800 - Literature	6067
300 - Social Sciences	4522
900-909, 930-999 - History	2413
600 - Useful Arts	1217
920-929 - Biography	863
500 - Science	819

Three months having largest circulation:

March 1957	4635
February 1957	3931
April 1957	3690

Number of days Library was open July 1 - June 30: 309

UNIVERSITY OF MASSACHUSETTS LIBRARY

Reference Department

Interlibrary Loan Statistics

July 1, 1956-June 30, 1957

Borrowed by University of Massachusetts

Requests filled	430
Requests unfilled	131
Total requests	561
Yale	56
Harvard	20
University of Connecticut	15
Places borrowed from	83

Borrowed from University of Massachusetts

Requests filled	164
Requests unfilled	67
Total requests	231
Smith	36
Amherst	24
University of Connecticut	21
Clark	7
Massachusetts Institute of Technology	7
Places borrowing	52

UNIVERSITY OF MASSACHUSETTS LIBRARY

Reserve Book Circulation

Hourly and Daily Averages

Books for Building Use

July 1, 1956 - June 30, 1957

Time	Total Circulation Hourly	Average Hourly
8-9 a.m.	1708	19
9-10 a.m.	2320	25
10-11 a.m.	2636	29
11-12 a.m.	1730	19
12-1 p.m.	1910	21
1-2 p.m.	2539	34
2-3 p.m.	3705	41
3-4 p.m.	3461	38
4-5 p.m.	1993	22
5-6 p.m.	1157	13
6-7 p.m.	2773	31
7-8 p.m.	3538	39
8-9 p.m.	2814	31
9-10 p.m.	1592	18

Time	Total Circulation Hourly	Average Hourly
8-9 a.m.	1370	15
9-10 a.m.	2022	22
10-11 a.m.	1977	21
11-12 a.m.	1478	16
12-1 p.m.	1722	18
1-2 p.m.	1674	21
2-3 p.m.	2595	27
3-4 p.m.	2170	23
4-5 p.m.	1347	14
5-6 p.m.	700	8
6-7 p.m.	1961	21
7-8 p.m.	2602	28
8-9 p.m.	2244	24
9-10 p.m.	1434	15

First Semester

Total Reserve Books circulated in Library
September 19, 1956 - January 21, 1957
33,876
Average circulated per day 376.40

Total Overnight Books circulated
September 19, 1956 - January 21, 1957
4,591
Average circulated per night 42.91

Second Semester

Total Reserve Books circulated in Library
January 30, 1957 - May 27, 1957
25,296
Average circulated per day 269.11

Total Overnight Books circulated
January 30, 1957 - May 27, 1957
3,640
Average circulated per night 33.09

UNIVERSITY OF MASSACHUSETTS LIBRARY

Reserve Book Circulation

Summer School

July 2, 1956 - August 11, 1956

Books for Building Use

Hours	Total	Average
8-9	48	2
9-10	113	4
10-11	118	4
11-12	59	3
12-1	0	0
1-2	44	2
2-3	25	2
3-4	27	2
4-5	3	1
Total	472	Average 17

Outside Overnight Circulation

Total	527
Average per day	20

UNIVERSITY OF MASSACHUSETTS LIBRARY

Number of Students Using Library Building

September 19-December 19, 1956

Monday-Friday	Total	Average
9:30	9337	151
3:00	9684	156
7:15	11327	189
8:45	11997	200
Saturday 10:00	855	71
Sunday 4:00	1957	163
8:45	1586	132

December 20, 1956-January 1, 1957

Total	Average
14	3
23	5

(Christmas Vacation)

January 2-January 29, 1957

Monday-Friday	Total	Average
9:30	1753	88
3:00	2213	111
7:15	2299	158
8:45	2572	184
Saturday 10:00	321	107
Sunday 4:00	563	188
8:45	346	115

January 30-March 20, 1957

Monday-Friday	Total	Average
9:30	3880	111
3:00	4190	120
7:15	4947	146
8:45	5046	148
Saturday 10:00	465	66
Sunday 4:00	1140	143
8:45	997	125

March 21-March 24, 1957

Total	Average
5	3
5	3

(Vacation)

March 25-May 27, 1957

Monday-Friday	Total	Average
9:30	4226	94
3:00	4087	91
7:15	5448	127
8:45	6239	145
Saturday 10:00	463	58
Sunday 4:00	927	116
8:45	1048	131

July 2-August 11, 1956

Total	Average
587	21
222	8

(Summer School)

GRAND TOTALS

Monday-Friday	Days	Total	Average
9:30	169	19,215	114
3:00	169	20,202	119
7:15	151	24,021	159
8:45	151	25,854	171
Saturday 10:00	30	2,104	70
Sunday 4:00	31	4,587	148
8:45	31	3,977	128

UNIVERSITY OF MASSACHUSETTS LIBRARY

Analysis of Expenditures: 1954/55 - 1956/57

	1954/55	1955/56	1956/57
Library Staff	$46,604.07	$49,782.59	$60,292.08
Student Assistants	5,004.44	5,482.92	5,462.00
Total Salaries	$51,608.51	$55,265.51	$65,754.08
Books	23,416.08	33,378	26,342.00
Periodicals	7,219.22	8,135	8,228.00
Total books & periodicals	$30,635.30	$41,513.00	$34,570.00
Binding	1,467.02	9,205.00	1,127.00
Miscellaneous	4,505.73	5,263.14	3,687.60
Total operating expenditure	$86,749.54	$111,246.65	$105,138.68
Library expenditure average per student	$ 21.20	$ 25.63	$ 23.28
Ratio: Library to total University expenditure	1.42%	1.50%	1.62%

BUREAU OF GOVERNMENT RESEARCH
ANNUAL REPORT
January 1, 1957 - December 31, 1957

At the close of 1957, the Bureau of Government Research completed the second year of operation. Through its activities, both on and off the campus, the work of the Bureau has touched every municipality in the state. The Bureau's trident action program of research, service, and training is directed toward improving government and administration at the state and local levels. During 1957 it continued to move forward into these areas.

Research

The Bureau issued eight publications and two newsletters covering subjects of interest and concern to state and local officials during the year. Our handbook series has enjoyed wide circulation and broad acceptance. In 1957 we published a handbook for school committee members, as well as starting preparation of handbooks for boards of health and municipal personnel boards. Through use of the handbooks, public officials need not act timorously or hesitantly for the want of information about their duties and responsibilities. Citizens need not hesitate to accept public office because of unfamiliarity with the requirements of the position. To prepare a handbook is an arduous task, for the laws of the commonwealth and the regulations of state departments must be scrutinized, harmonized, and translated into the vernacular of laymen. Because of the propensity of state government to control in minute detail the functions and operations of local government, the laws and regulations are almost uncountable in number and unwieldy in interpretation. We found in preparing a

handbook for Massachusetts selectmen more than 700 sections of laws affecting them. Approximately 400 provisions formally state the duties of boards of health. Selectmen who act as boards of health have an astronomical 1100 sections of law that contain and direct their action. Through use of our handbooks, selectmen and other officials have their duties spelled out in a concise, yet complete, pamphlet. The Bureau plans to continue working on handbooks until all important local officials' positions are covered.

The Bureau does not only attend to existing problems, but it is concerned with problems that are developing in the field of government. Anticipating the change in the structure of local government, the Bureau published in 1957 Guide for Establishing a Representative Town Meeting. This publication is already being used by towns that are converting from the "open" town meeting to a "limited" meeting.

The Bureau has been emphasizing research in prosaic and mundane problems affecting local government. In Massachusetts this area has long been neglected in the past and portends to be increasingly important as urbanization increases at a rapid rate.

Training

There is a substantial difference in knowing the duties of a position and performing those duties effectively and efficiently; so the Bureau is vitally concerned with training officials as well as informing them. During 1957 we held training programs for assessors, town and city managers, public personnel boards and appraisers, as well as conducting the Governor's Conference for Local Officials. Through training programs and conferences organized

by the Bureau, more than 1,000 public officials attended sessions on the campus. The enthusiasm of participants also created a desire of so many other groups of public officials to hold training schools at the University that the Bureau is hard pressed to accommodate them. During 1958 additional training schools for school board members, city councillors, town auditors and accountants, and public utility officers are being planned.

Through short-course training programs the Bureau has the greatest immediate impact on local government improvement. Because housing facilities are limited by the school calendar, courses that can be offered by the Bureau are limited. The training programs would be increased to include all groups of public officials if continuing education facilities were available on a year around schedule. Until such time, the in-service training for public officials will of necessity be restricted in number.

To train officials already on the job is not sufficient. Provisions should be made to furnish public service with students trained in public administration. Government should have first claim to the talent developed in a public institution at public expense. In the past, governments in Massachusetts have not exercised their option except in a limited way by using mainly persons trained in teaching. The Bureau of Government Research in cooperation with the Government Department is moving towards a graduate program in public administration so that the University may make a more substantial contribution to society by producing professionally trained young men and women for state and local public service. The staff of the Bureau will teach some of the professional courses and will be responsible for arranging and supervising

the students' internships in government organizations.

Service

Public officials are increasingly calling upon the Bureau for consultant services. Recurring questions from public officials help set the direction of our research projects and publications. The Bureau serves as advisor to many of the associations of public officials. We are a repository for all material of the Massachusetts Municipal Personnel Association. More and more private citizens as well as national societies are seeking information from us. Starting in 1958 we will be the Massachusetts correspondent for the Municipal Year Book and other publications.

The success that the Bureau of Government Research enjoyed in 1957 was due in large part to the wholehearted cooperation of the University administration. For this the Bureau is deeply appreciative. For a more detailed and summary account from the Bureau of Government Research's activities in 1957 see the attached summary.

JOHN GILLESPIE
Director

ANNUAL REPORT SUMMARY
BUREAU OF GOVERNMENT RESEARCH
UNIVERSITY OF MASSACHUSETTS

January 1, 1957 - December 31, 1957

PUBLICATIONS

Handbook for Massachusetts School Committees
Intermunicipal Relations in Massachusetts
Local-State-Federal Fiscal Relations in Massachusetts
Home Rule Possibilities in Massachusetts
Proceedings of the First Annual Assessors' School
Massachusetts Selectmen's Newsletter, Volume 1, No. 1 and No. 2
Participation in Representative Town Meetings in Massachusetts
A Guide for Establishing a Representative Town Meeting
Departmental Expenditures of Massachusetts Towns

CONFERENCES AND TRAINING SCHOOLS CONDUCTED

Eighth Governor's Conference--2 days
Second Annual School for Massachusetts Assessors--4 days
Conference of Western Massachusetts Residential Appraisers--3 days
Conference of Massachusetts City Managers--1 day
Conference of Massachusetts Municipal Personnel Boards--1 day
Hampshire County Selectmen's Association

PRINCIPAL SPEAKING ENGAGEMENTS

Annual Meeting, Massachusetts Selectmen's Association, Springfield
Annual Meeting, Massachusetts Assessors' Association, Boston
Annual Meeting, Massachusetts Moderators' Association, Sturbridge
Annual Meeting, Massachusetts Association of School Committees, Newton
Annual Meeting, Western Massachusetts Association of Town Finance Committees, Amherst
Seventh Governor's Conference, Boston
Eighth Governor's Conference, University of Massachusetts
Annual School for Massachusetts Assessors, University of Massachusetts
Conference of Massachusetts City Managers, University of Massachusetts
Hampshire County Selectmen's Association, University of Massachusetts
Junior Chamber of Commerce, Springfield
Business and Professional Women's Club, Springfield
University of Massachusetts Cape Cod Alumni Club, Yarmouth
Town Forum, Orleans
Society for Residential Appraisers, Holyoke
School Committee Seminar, Smith College
Chamber of Commerce, Amherst
Hampshire and Hampden County Assessors' Association, Amherst
Amherst High School
North Amherst Men's Club

CONFERENCES ATTENDED

American Political Science Association, New York
American Society for Public Administration, Boston Chapter
American Association of College Public Relations' Officers, New Haven
Mental Health Conference, University of Massachusetts
Town Finance Committees' Association, Amherst
Massachusetts City Managers' Association, Framingham
New England Political Science Association, Hanover, New Hampshire
Area College Public Relations' Officers, Mt. Holyoke College
University and Secondary School Public Relations' Officers, Williston Academy
Annual Meeting, Massachusetts Town Clerks' Association, Great Barrington
Governor's Conference on Higher Education, Harvard
Massachusetts Moderators' Association, Northampton
Special Conference on Local Government, University of Connecticut

SPECIAL PROJECTS

Training program for Korean legislators
Training program for Korean mayor
Member, Board of Editors, Massachusetts Municipal Manual
Research agency for Commission on State-Local Relations
Staff organization for the Ninth Governor's Conference
Judging Connecticut town report contest
Research project for Extension Service of the University of Massachusetts
Annual Town Report Contest
Teaching one class each semester in Municipal Government

SPECIAL AWARD

"Citizenship Award," 1957, Advertising Club of Boston

SPECIAL ACTIVITIES

Radio broadcast, WHAI, Role of the Bureau of Government Research
Dedicated town recreation hall, Huntington
Dedicated new elementary school, East Brookfield

CONSULTATION

Selectmen, Ware, Massachusetts
Congressional Committee on Federal-State Relations
Town of Amherst Selectmen
Town of Amherst Waste Disposal Committee
Town of Winchendon Representative Town Meeting Committee

Town of Palmer Representative Town Meeting Committee
Town of Hingham Town Report Committee
Massachusetts Selectmen's Association
Massachusetts Public Personnel Boards Association

During 1957, the Bureau of Government Research received more than 500 requests for publications and information from private citizens and citizen groups.

The director of the Bureau was acting director of the News and Information Office of the University from December 15, 1956 to June 30, 1957.

STAFF

John Gillespie, Director
Robert P. Bolan, Assistant Director
Edwin A. Gere, Jr., Training Officer
Eileen H. MacLeod, Research Associate
Hazel J. Morey, Administrative Secretary